FORM 3

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL	**1. WELL NAME and NUMBER** NBU 1022-8C1AS
2. TYPE OF WORK DRILL NEW WELL (●) REENTER P&A WELL ( ) DEEPEN WELL ( )	**3. FIELD OR WILDCAT** NATURAL BUTTES
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO	**5. UNIT or COMMUNITIZATION AGREEMENT NAME** NATURAL BUTTES
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.	**7. OPERATOR PHONE** 720 929-6587
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217	**9. OPERATOR E-MAIL** mary.mondragon@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU 0466	**11. MINERAL OWNERSHIP** FEDERAL (●) INDIAN ( ) STATE ( ) FEE ( )
	12. SURFACE OWNERSHIP FEDERAL (●) INDIAN ( ) STATE ( ) FEE ( )
13. NAME OF SURFACE OWNER (if box 12 = 'fee')	**14. SURFACE OWNER PHONE (if box 12 = 'fee')**
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')	**16. SURFACE OWNER E-MAIL (if box 12 = 'fee')**
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')	**18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS** YES (●) (Submit Commingling Application) NO ( )
	19. SLANT VERTICAL ( ) DIRECTIONAL (●) HORIZONTAL ( )

20. LOCATION OF WELL	**FOOTAGES**	**QTR-QTR**	**SECTION**	**TOWNSHIP**	**RANGE**	**MERIDIAN**
LOCATION AT SURFACE	943 FNL 1725 FEL	NWNE	8	10.0 S	22.0 E	S
Top of Uppermost Producing Zone	102 FNL 2415 FWL	NENW	8	10.0 S	22.0 E	S
At Total Depth	102 FNL 2415 FWL	NENW	8	10.0 S	22.0 E	S

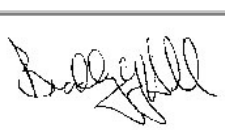
21. COUNTY UINTAH	**22. DISTANCE TO NEAREST LEASE LINE (Feet)** 102	**23. NUMBER OF ACRES IN DRILLING UNIT** 454
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 360	**26. PROPOSED DEPTH** MD: 9503 TVD: 9100
27. ELEVATION - GROUND LEVEL 5185	**28. BOND NUMBER** WYB000291	**29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE** Permit #43-8496

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ **WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER**	☑ **COMPLETE DRILLING PLAN**
☐ **AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)**	☐ **FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER**
☑ **DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)**	☑ **TOPOGRAPHICAL MAP**

NAME Danielle Piernot	**TITLE** Regulatory Analyst	**PHONE** 720 929-6156
SIGNATURE	**DATE** 08/17/2009	**EMAIL** danielle.piernot@anadarko.com

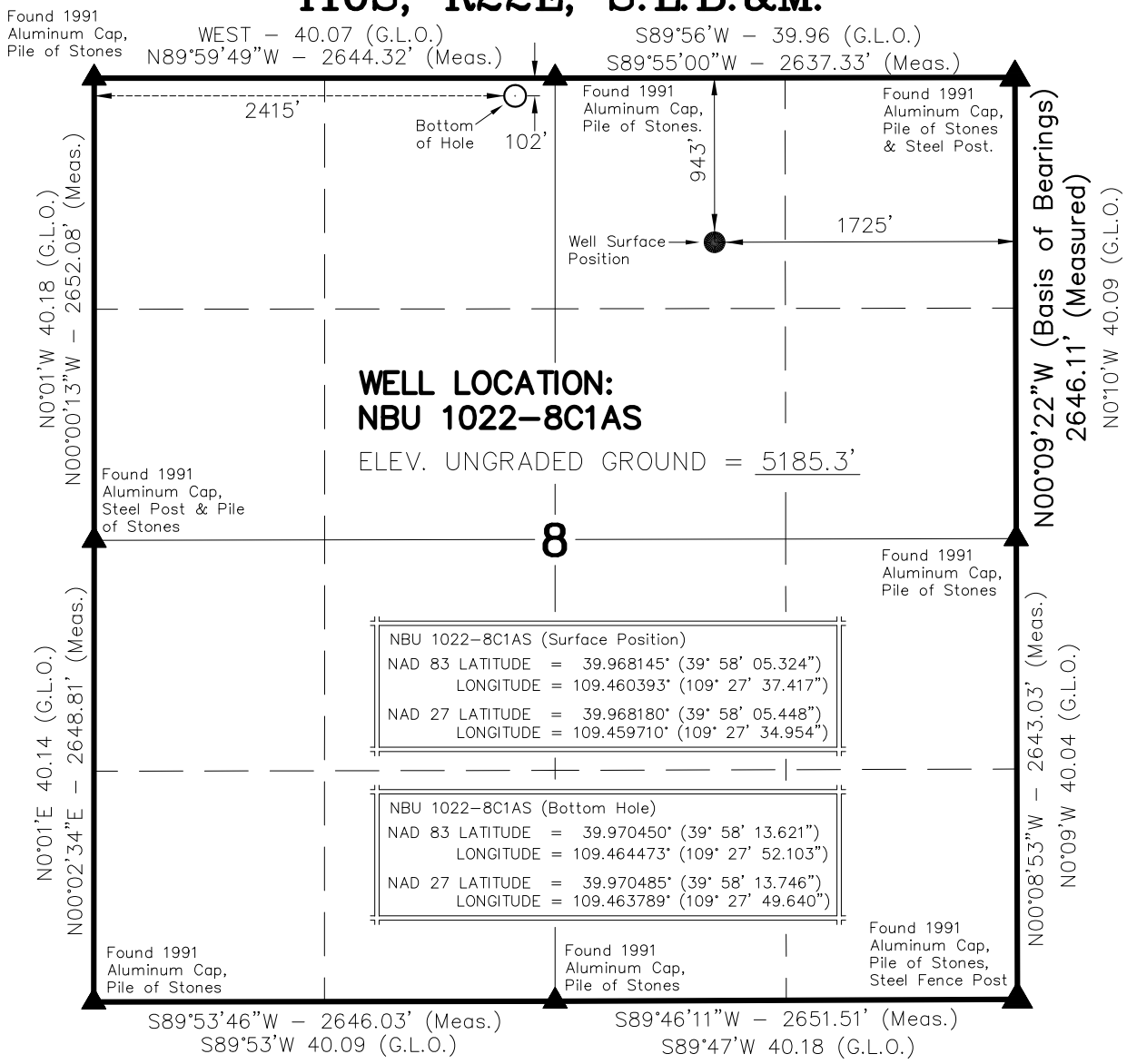
API NUMBER ASSIGNED 43047506420000	**APPROVAL**  Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	9503		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 Buttress	9503	11.6			

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	2240		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	2240	36.0			

'APIWellNo:43047506420000'

T10S, R22E, S.L.B.&M.



NOTES:

▲ = Section Corners Located

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. The Bottom of hole bears N53°42'40"W 1418.94' from the Surface Position.
4. Bearings are based on Global Positioning Satellite observations.
5. Basis of elevation is Tri–Sta "Two Water" located in the NW ¼ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri–Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.

1000' 500' 0' 1000'

SCALE

N

SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR No.362251 KOLBY R. KAY STATE OF UTAH

REGISTERED LAND SURVEYOR
REGISTRATION No. 362251
STATE OF UTAH

Kerr–McGee
Oil & Gas Onshore, LP
1099 18th Street – Denver, Colorado 80202

NBU 1022-8C1AS
WELL PLAT
102' FNL, 2415' FWL (Bottom Hole)
NE ¼ NW ¼ OF SECTION 8, T10S, R22E,
S.L.B.&M. UINTAH COUNTY, UTAH.

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE (435) 789–1365
ENGINEERING & LAND SURVEYING, INC.
38 WEST 100 NORTH – VERNAL, UTAH 84078

DATE SURVEYED: 09–18–08	SURVEYED BY: M.S.B.	SHEET
DATE DRAWN: 10–03–08	DRAWN BY: M.W.W.	2
SCALE: 1" = 1000'	Date Last Revised: 01–21–09	OF 13

'APIWellNo:43047506420000'

Scientific Drilling
Rocky Mountain Operations

Project: Uintah County, UT NAD27
Site: NBU 1022-8B Pad
Well: NBU 1022-8C1AS
Wellbore: OH
Design: Plan #1

Kerr McGee Oil and Gas Onshore LP

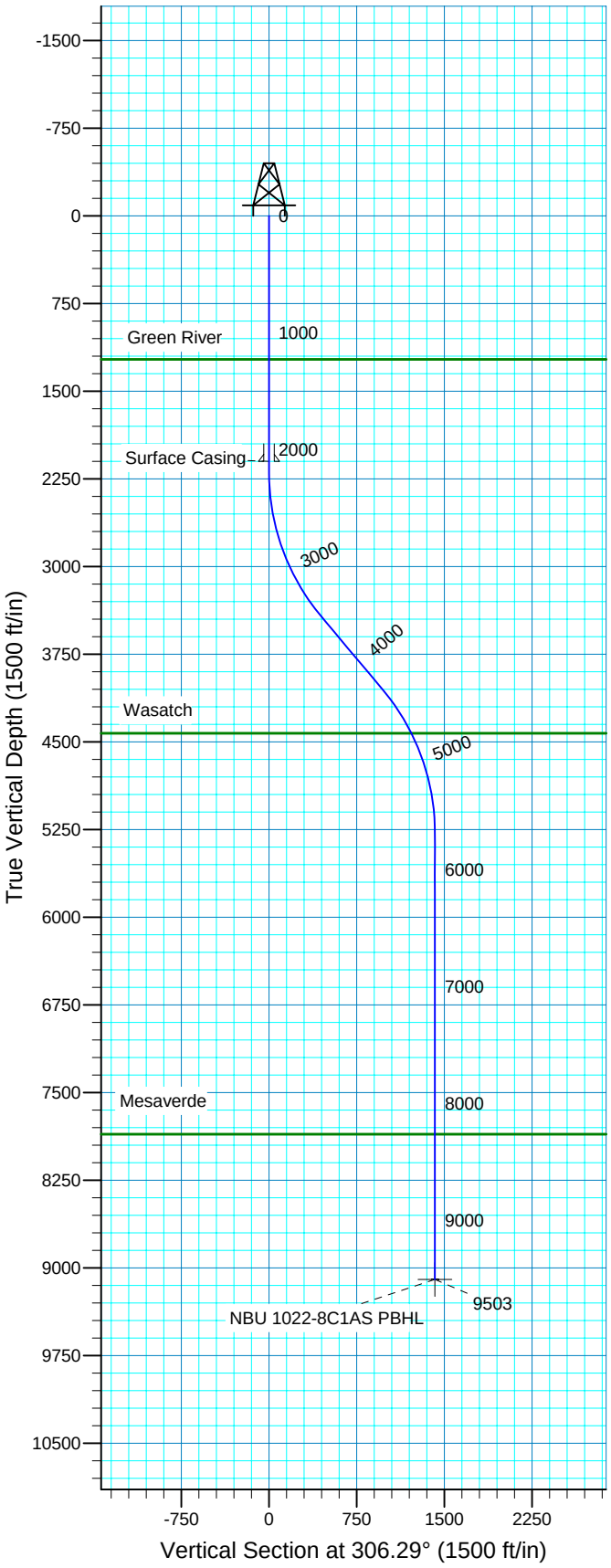
Azimuths to True North
Magnetic North: 11.35°

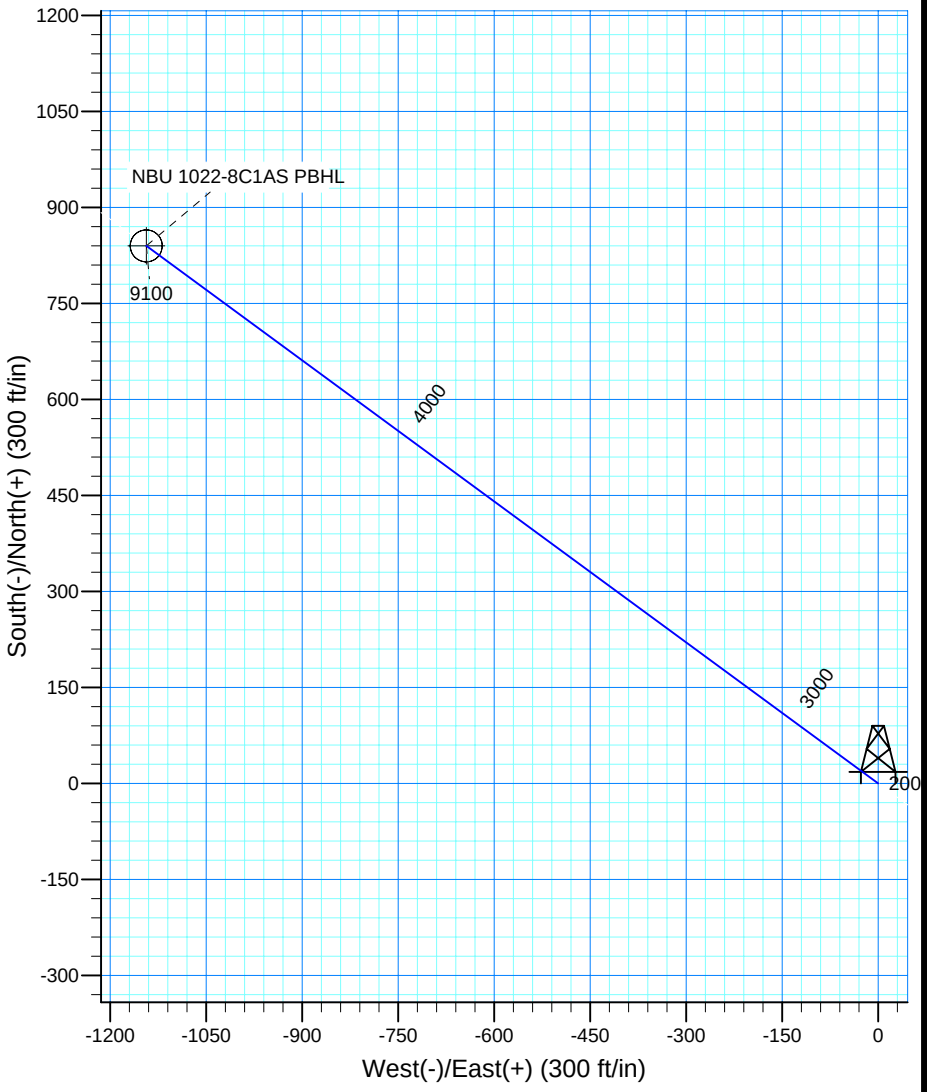
Magnetic Field
Strength: 52583.6snT
Dip Angle: 65.92°
Date: 1/7/2009
Model: IGRF2005-10

WELL DETAILS: NBU 1022-8C1AS

Ground Level: GL 5183' & RKB 18' @ 5201.00ft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	601978.23	2571793.74	39° 58' 5.450 N	109° 27' 34.950 W





FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1227.00	1227.00	Green River
4427.00	4798.17	Wasatch
7856.00	8258.56	Mesaverde

Plan: Plan #1 (NBU 1022-8C1AS/OH)

Created By: Laura Turner Date: 2009-01-07

PROJECT DETAILS: Uintah County, UT NAD27

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Utah Central 4302
System Datum: Mean Sea Level
Local North: True

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	
3533.33	40.00	306.29	3427.63	264.47	-360.15	3.00	306.29	446.82	
4350.43	40.00	306.29	4053.57	575.34	-783.49	0.00	0.00	972.04	
5683.77	0.00	0.00	5281.20	839.81	-1143.63	3.00	180.00	1418.87	
9502.56	0.00	0.00	9100.00	839.81	-1143.63	0.00	0.00	1418.87	NBU 1022-8C1AS PBHL

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT NAD27
NBU 1022-8B Pad
NBU 1022-8C1AS
OH

Plan: Plan #1

Standard Planning Report

07 January, 2009

Scientific Drilling

Planning Report

Database:	EDM2003.16 MultiuserDB	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5183' & RKB 18' @ 5201.00ft
Project:	Uintah County, UT NAD27	**MD Reference:**	GL 5183' & RKB 18' @ 5201.00ft
Site:	NBU 1022-8B Pad	**North Reference:**	True
Well:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project Uintah County, UT NAD27

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		

Site NBU 1022-8B Pad, Sec 8 T10S R21E

Site Position:		**Northing:**	602,016.99 ft	**Latitude:**	39° 58' 5.840 N
From:	Lat/Long	**Easting:**	2,571,762.48 ft	**Longitude:**	109° 27' 35.340 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	1.31 °

Well NBU 1022-8C1AS, 943' FNL 1725' FEL

Well Position	**+N/-S**	0.00 ft	**Northing:**	601,978.23 ft	**Latitude:**	39° 58' 5.450 N
	+E/-W	0.00 ft	**Easting:**	2,571,793.74 ft	**Longitude:**	109° 27' 34.950 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,183.00 ft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	1/7/2009	11.35	65.92	52,584

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	306.29

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,533.33	40.00	306.29	3,427.63	264.47	-360.15	3.00	3.00	0.00	306.29	
4,350.43	40.00	306.29	4,053.57	575.34	-783.49	0.00	0.00	0.00	0.00	
5,683.77	0.00	0.00	5,281.20	839.81	-1,143.63	3.00	-3.00	0.00	180.00	
9,502.56	0.00	0.00	9,100.00	839.81	-1,143.63	0.00	0.00	0.00	0.00	NBU 1022-8C1AS F

Scientific Drilling

Planning Report

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Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5183' & RKB 18' @ 5201.00ft
Project:	Uintah County, UT NAD27	**MD Reference:**	GL 5183' & RKB 18' @ 5201.00ft
Site:	NBU 1022-8B Pad	**North Reference:**	True
Well:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,227.00	0.00	0.00	1,227.00	0.00	0.00	0.00	0.00	0.00	0.00
Green River									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Casing									
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	3.00	306.29	2,299.95	1.55	-2.11	2.62	3.00	3.00	0.00
2,400.00	6.00	306.29	2,399.63	6.19	-8.43	10.46	3.00	3.00	0.00
2,500.00	9.00	306.29	2,498.77	13.92	-18.95	23.51	3.00	3.00	0.00
2,600.00	12.00	306.29	2,597.08	24.70	-33.64	41.74	3.00	3.00	0.00
2,700.00	15.00	306.29	2,694.31	38.52	-52.45	65.08	3.00	3.00	0.00
2,800.00	18.00	306.29	2,790.18	55.33	-75.34	93.48	3.00	3.00	0.00
2,900.00	21.00	306.29	2,884.43	75.08	-102.25	126.85	3.00	3.00	0.00
3,000.00	24.00	306.29	2,976.81	97.73	-133.09	165.12	3.00	3.00	0.00
3,100.00	27.00	306.29	3,067.06	123.21	-167.78	208.16	3.00	3.00	0.00
3,200.00	30.00	306.29	3,154.93	151.45	-206.24	255.87	3.00	3.00	0.00
3,300.00	33.00	306.29	3,240.18	182.37	-248.35	308.12	3.00	3.00	0.00
3,400.00	36.00	306.29	3,322.59	215.89	-294.00	364.75	3.00	3.00	0.00
3,500.00	39.00	306.29	3,401.91	251.92	-343.06	425.62	3.00	3.00	0.00
3,533.33	40.00	306.29	3,427.63	264.47	-360.15	446.82	3.00	3.00	0.00
3,600.00	40.00	306.29	3,478.70	289.83	-394.69	489.67	0.00	0.00	0.00
3,700.00	40.00	306.29	3,555.31	327.88	-446.50	553.95	0.00	0.00	0.00
3,800.00	40.00	306.29	3,631.91	365.93	-498.31	618.23	0.00	0.00	0.00
3,900.00	40.00	306.29	3,708.52	403.97	-550.12	682.51	0.00	0.00	0.00
4,000.00	40.00	306.29	3,785.12	442.02	-601.93	746.79	0.00	0.00	0.00
4,100.00	40.00	306.29	3,861.73	480.06	-653.74	811.07	0.00	0.00	0.00
4,200.00	40.00	306.29	3,938.33	518.11	-705.55	875.35	0.00	0.00	0.00
4,300.00	40.00	306.29	4,014.93	556.16	-757.36	939.63	0.00	0.00	0.00
4,350.43	40.00	306.29	4,053.57	575.34	-783.49	972.04	0.00	0.00	0.00
4,400.00	38.51	306.29	4,091.95	593.91	-808.77	1,003.41	3.00	-3.00	0.00
4,500.00	35.51	306.29	4,171.79	629.53	-857.28	1,063.60	3.00	-3.00	0.00
4,600.00	32.51	306.29	4,254.67	662.64	-902.36	1,119.53	3.00	-3.00	0.00
4,700.00	29.51	306.29	4,340.37	693.13	-943.89	1,171.05	3.00	-3.00	0.00

Scientific Drilling

Planning Report

Database:	EDM2003.16 MultiuserDB	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5183' & RKB 18' @ 5201.00ft
Project:	Uintah County, UT NAD27	**MD Reference:**	GL 5183' & RKB 18' @ 5201.00ft
Site:	NBU 1022-8B Pad	**North Reference:**	True
Well:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,798.17	26.57	306.29	4,427.00	720.44	-981.08	1,217.19	3.00	-3.00	0.00
Wasatch									
4,800.00	26.51	306.29	4,428.64	720.93	-981.74	1,218.01	3.00	-3.00	0.00
4,900.00	23.51	306.29	4,519.25	745.95	-1,015.82	1,260.29	3.00	-3.00	0.00
5,000.00	20.51	306.29	4,611.95	768.13	-1,046.02	1,297.77	3.00	-3.00	0.00
5,100.00	17.51	306.29	4,706.48	787.42	-1,072.28	1,330.34	3.00	-3.00	0.00
5,200.00	14.51	306.29	4,802.59	803.74	-1,094.51	1,357.92	3.00	-3.00	0.00
5,300.00	11.51	306.29	4,900.01	817.07	-1,112.66	1,380.44	3.00	-3.00	0.00
5,400.00	8.51	306.29	4,998.48	827.36	-1,126.67	1,397.82	3.00	-3.00	0.00
5,500.00	5.51	306.29	5,097.72	834.58	-1,136.51	1,410.03	3.00	-3.00	0.00
5,600.00	2.51	306.29	5,197.46	838.72	-1,142.15	1,417.03	3.00	-3.00	0.00
5,683.77	0.00	0.00	5,281.20	839.81	-1,143.63	1,418.87	3.00	-3.00	0.00
5,700.00	0.00	0.00	5,297.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
5,800.00	0.00	0.00	5,397.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
5,900.00	0.00	0.00	5,497.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,000.00	0.00	0.00	5,597.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,100.00	0.00	0.00	5,697.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,200.00	0.00	0.00	5,797.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,300.00	0.00	0.00	5,897.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,400.00	0.00	0.00	5,997.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,500.00	0.00	0.00	6,097.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,600.00	0.00	0.00	6,197.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,700.00	0.00	0.00	6,297.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,800.00	0.00	0.00	6,397.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
6,900.00	0.00	0.00	6,497.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,000.00	0.00	0.00	6,597.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,100.00	0.00	0.00	6,697.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,200.00	0.00	0.00	6,797.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,300.00	0.00	0.00	6,897.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,400.00	0.00	0.00	6,997.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,500.00	0.00	0.00	7,097.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,600.00	0.00	0.00	7,197.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,700.00	0.00	0.00	7,297.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,800.00	0.00	0.00	7,397.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
7,900.00	0.00	0.00	7,497.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,000.00	0.00	0.00	7,597.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,100.00	0.00	0.00	7,697.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,200.00	0.00	0.00	7,797.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,258.56	0.00	0.00	7,856.00	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
Mesaverde									
8,300.00	0.00	0.00	7,897.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,400.00	0.00	0.00	7,997.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,500.00	0.00	0.00	8,097.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,600.00	0.00	0.00	8,197.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,700.00	0.00	0.00	8,297.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,800.00	0.00	0.00	8,397.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
8,900.00	0.00	0.00	8,497.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
9,000.00	0.00	0.00	8,597.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
9,100.00	0.00	0.00	8,697.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
9,200.00	0.00	0.00	8,797.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
9,300.00	0.00	0.00	8,897.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
9,400.00	0.00	0.00	8,997.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
9,500.00	0.00	0.00	9,097.44	839.81	-1,143.63	1,418.87	0.00	0.00	0.00

Scientific Drilling

Planning Report

Database:	EDM2003.16 MultiuserDB	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5183' & RKB 18' @ 5201.00ft
Project:	Uintah County, UT NAD27	**MD Reference:**	GL 5183' & RKB 18' @ 5201.00ft
Site:	NBU 1022-8B Pad	**North Reference:**	True
Well:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,502.56	0.00	0.00	9,100.00	839.81	-1,143.63	1,418.87	0.00	0.00	0.00
NBU 1022-8C1AS PBHL									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 1022-8C1AS PB - plan hits target center - Circle (radius 25.00)	0.00	0.00	9,100.00	839.81	-1,143.63	602,791.74	2,570,631.25	39° 58' 13.750 N	109° 27' 49.640 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,100.00	2,100.00	Surface Casing	9.625	13.500

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,227.00	1,227.00	Green River		0.00	
4,798.17	4,427.00	Wasatch		0.00	
8,258.56	7,856.00	Mesaverde		0.00	

NBU 1022-8C1AS

Pad: NBU 1022-8B
Surface: 943’ FNL 1,725’ FEL (NW/4NE/4)
BHL: 102’ FNL 2,415’ FWL (NE/4NW/4)
Sec. 8 T10S R22E

Uintah, Utah
Mineral Lease: UTU 0466

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. – 2. Estimated Tops of Important Geologic Markers:
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Formation	Depth	Resource
Uinta	0 – Surface	
Green River	1,227’	
Birds Nest	1,575’	Water
Mahogany	2,040’	Water
Wasatch	4,427’	Gas
Mesaverde	6,955’	Gas
MVU2	7,856’	Gas
MVL1	8,451’	Gas
TVD	9,100’	
TD	9,503’	

3. Pressure Control Equipment (Schematic Attached)

Please refer to the attached Drilling Program.

4. Proposed Casing & Cementing Program:

Please refer to the attached Drilling Program.

5. Drilling Fluids Program:

Please refer to the attached Drilling Program.

6. Evaluation Program:

Please refer to the attached Drilling Program.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 9,100' TVD, approximately equals 5,433 psi (calculated at 0.60 psi/foot).

Maximum anticipated surface pressure equals approximately 3,431 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background
In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements
KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). The air rig operation utilizes a 5M BOPE when drilling. This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.

’APIWellNo:43047506420000’

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	August 17, 2009	
WELL NAME	**NBU 1022-8C1AS**		TD	9,100' TVD	9,503' MD
FIELD	Natural Buttes	COUNTY Uintah STATE Utah		FINISHED ELEVATION	5,183'
SURFACE LOCATION	NW/4 NE/4	943' FNL 1,725' FEL	Sec 8	T 10S	R 22E
	Latitude:	39.968145	Longitude:	-109.460393	NAD 83
BTM HOLE LOCATION	NE/4 NW/4	102' FNL 2,415' FWL	Sec 8	T 10S	R 22E
	Latitude:	39.970450	Longitude:	-109.464473	NAD 83
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), Tri-County Health Dept.				

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		20'		14"	
			12-1/4"	9-5/8", 36#, J-55, LTC	Air mist

All water flows encountered while drilling will be reported to the appropriate agencies.

Green River @	1,227'
Top of Birds Nest @	1,575'
Mahogany @	2,040'
Preset f/ GL @	2,240' MD

Note: 12.25" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the acutal depth of the loss zone.

Wasatch @	4,427'

Mud logging program TBD
Cased hole logging program from TD - surf csg

Mverde @	6,955' TVD
MVU2 @	7,856' TVD
MVU1 @	8,451' TVD

			7-7/8"	4-1/2" 11.6# I-80 or equivalent BTC csg	Water / Fresh Water Mud 8.3-11.7 ppg

Max anticipated Mud required 11.7 ppg

TD @ 9,100' TVD 9,503' MD

'APIWellNo:43047506420000'

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3,520	2,020	453,000
SURFACE	9-5/8"	0	to	2,240	36.00	J-55	LTC	0.95	1.93	7.15
								7,780	6,350	278,000
PRODUCTION	4-1/2"	0	to	9,503	11.60	I-80	BTC	2.20	1.15	2.89

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
(Burst Assumptions: TD = 11.7 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 3,431 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 11.7 ppg) 0.6 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 5,433 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	380	0%	15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
			Premium cmt + 2% CaCl				
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	1,740'	65/35 Poz + 6% Gel + 10 pps gilsonite	410	35%	12.60	1.81
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,923'	Premium Lite II + 3% KCl + 0.25 pps	370	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,580'	50/50 Poz/G + 10% salt + 2% gel	1,370	40%	14.30	1.31
			+ 0.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

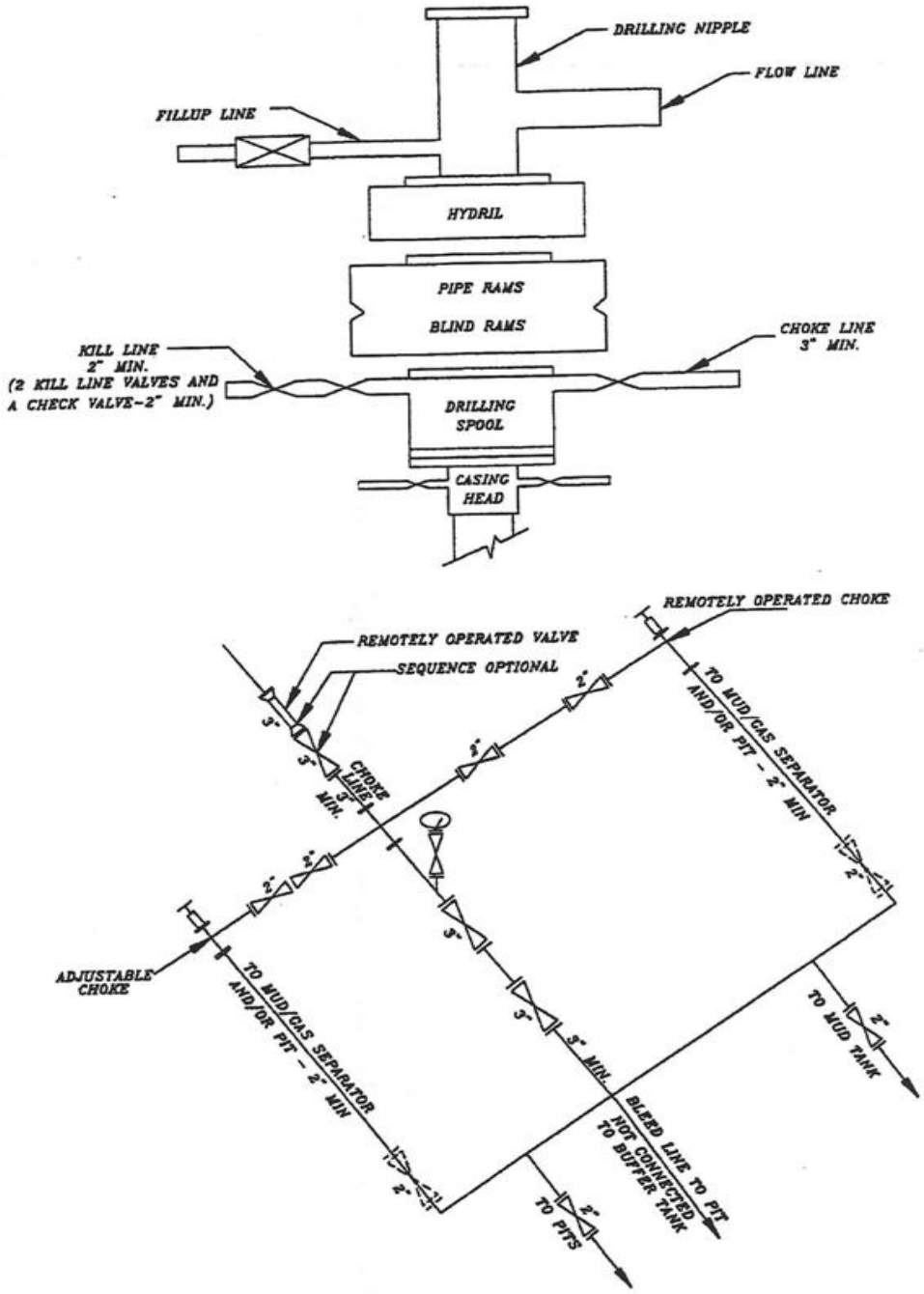
Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____
John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____
John Merkel / Lovel Young

EXHIBIT A
NBU 1022-8C1AS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

WELL PAD INTERFERENCE PLAT

DIRECTIONAL PAD – NBU 343

SURFACE POSITION FOOTAGES:

NBU 1022–8C1CS
955' FNL & 1742' FEL

NBU 1022–8C1AS
943' FNL & 1725' FEL

NBU 1022–8B1DS
931' FNL & 1709' FEL

NBU 1022–8B4AS
919' FNL & 1693' FEL

BOTTOM HOLE FOOTAGES

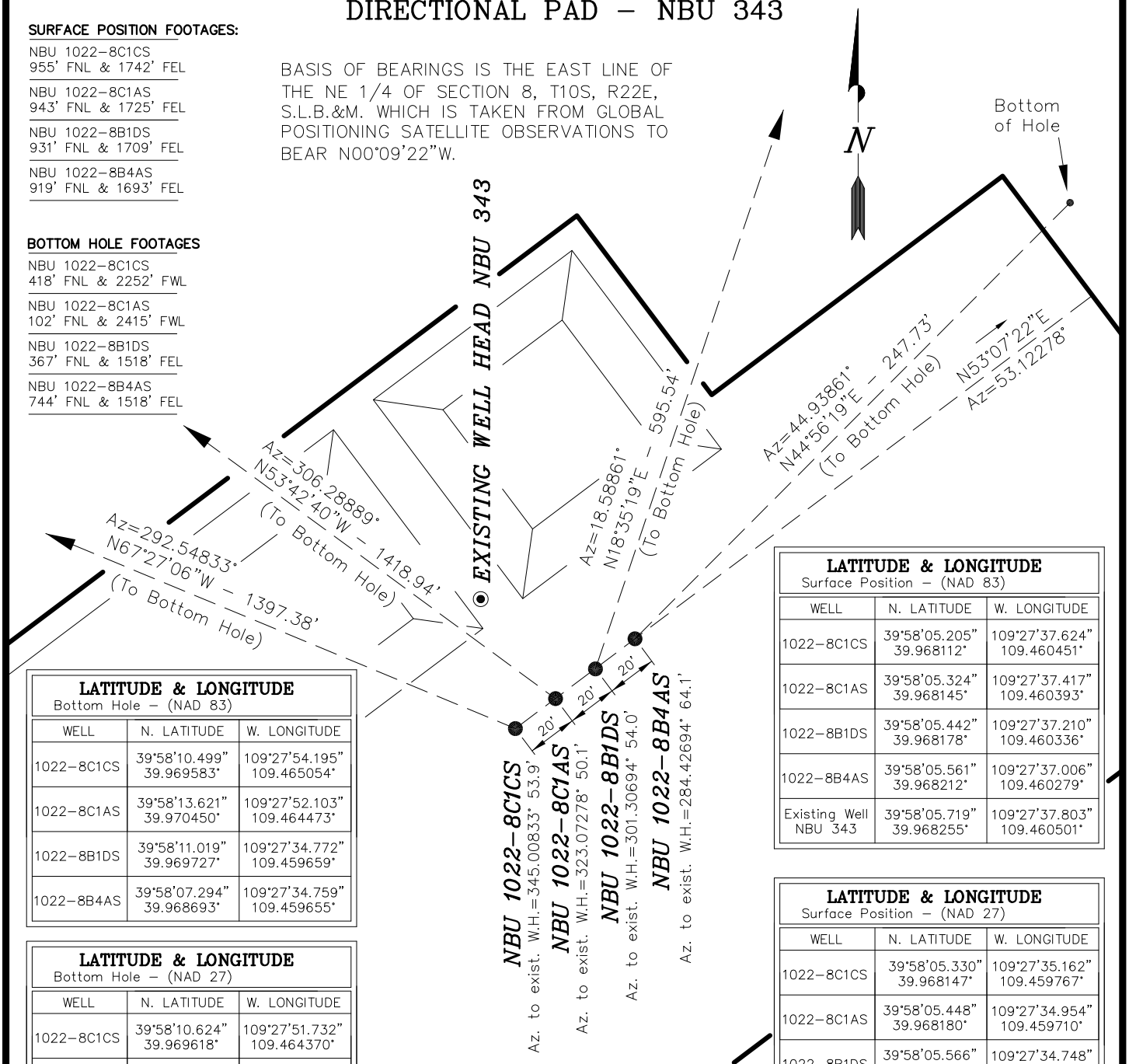
NBU 1022–8C1CS
418' FNL & 2252' FWL

NBU 1022–8C1AS
102' FNL & 2415' FWL

NBU 1022–8B1DS
367' FNL & 1518' FEL

NBU 1022–8B4AS
744' FNL & 1518' FEL

BASIS OF BEARINGS IS THE EAST LINE OF THE NE 1/4 OF SECTION 8, T10S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°09'22"W.



LATITUDE & LONGITUDE
Bottom Hole – (NAD 83)

WELL	N. LATITUDE	W. LONGITUDE
1022–8C1CS	39°58'10.499" 39.969583°	109°27'54.195" 109.465054°
1022–8C1AS	39°58'13.621" 39.970450°	109°27'52.103" 109.464473°
1022–8B1DS	39°58'11.019" 39.969727°	109°27'34.772" 109.459659°
1022–8B4AS	39°58'07.294" 39.968693°	109°27'34.759" 109.459655°

LATITUDE & LONGITUDE
Bottom Hole – (NAD 27)

WELL	N. LATITUDE	W. LONGITUDE
1022–8C1CS	39°58'10.624" 39.969618°	109°27'51.732" 109.464370°
1022–8C1AS	39°58'13.746" 39.970485°	109°27'49.640" 109.463789°
1022–8B1DS	39°58'11.143" 39.969762°	109°27'32.310" 109.458975°
1022–8B4AS	39°58'07.419" 39.968727°	109°27'32.297" 109.458971°

LATITUDE & LONGITUDE
Surface Position – (NAD 83)

WELL	N. LATITUDE	W. LONGITUDE
1022–8C1CS	39°58'05.205" 39.968112°	109°27'37.624" 109.460451°
1022–8C1AS	39°58'05.324" 39.968145°	109°27'37.417" 109.460393°
1022–8B1DS	39°58'05.442" 39.968178°	109°27'37.210" 109.460336°
1022–8B4AS	39°58'05.561" 39.968212°	109°27'37.006" 109.460279°
Existing Well NBU 343	39°58'05.719" 39.968255°	109°27'37.803" 109.460501°

LATITUDE & LONGITUDE
Surface Position – (NAD 27)

WELL	N. LATITUDE	W. LONGITUDE
1022–8C1CS	39°58'05.330" 39.968147°	109°27'35.162" 109.459767°
1022–8C1AS	39°58'05.448" 39.968180°	109°27'34.954" 109.459710°
1022–8B1DS	39°58'05.566" 39.968213°	109°27'34.748" 109.459652°
1022–8B4AS	39°58'05.686" 39.968246°	109°27'34.544" 109.459596°
Existing Well NBU 343	39°58'05.844" 39.968290°	109°27'35.341" 109.459817°

RELATIVE COORDINATES
From Surface Position to Bottom Hole

WELL	NORTH	EAST
1022–8C1CS	536'	–1,291'
1022–8C1AS	840'	–1,144'
1022–8B1DS	564'	190'
1022–8B4AS	175'	175'

60' 30' 0' 60'

SCALE

Kerr–McGee
Oil & Gas Onshore, LP
1099 18th Street – Denver, Colorado 80202

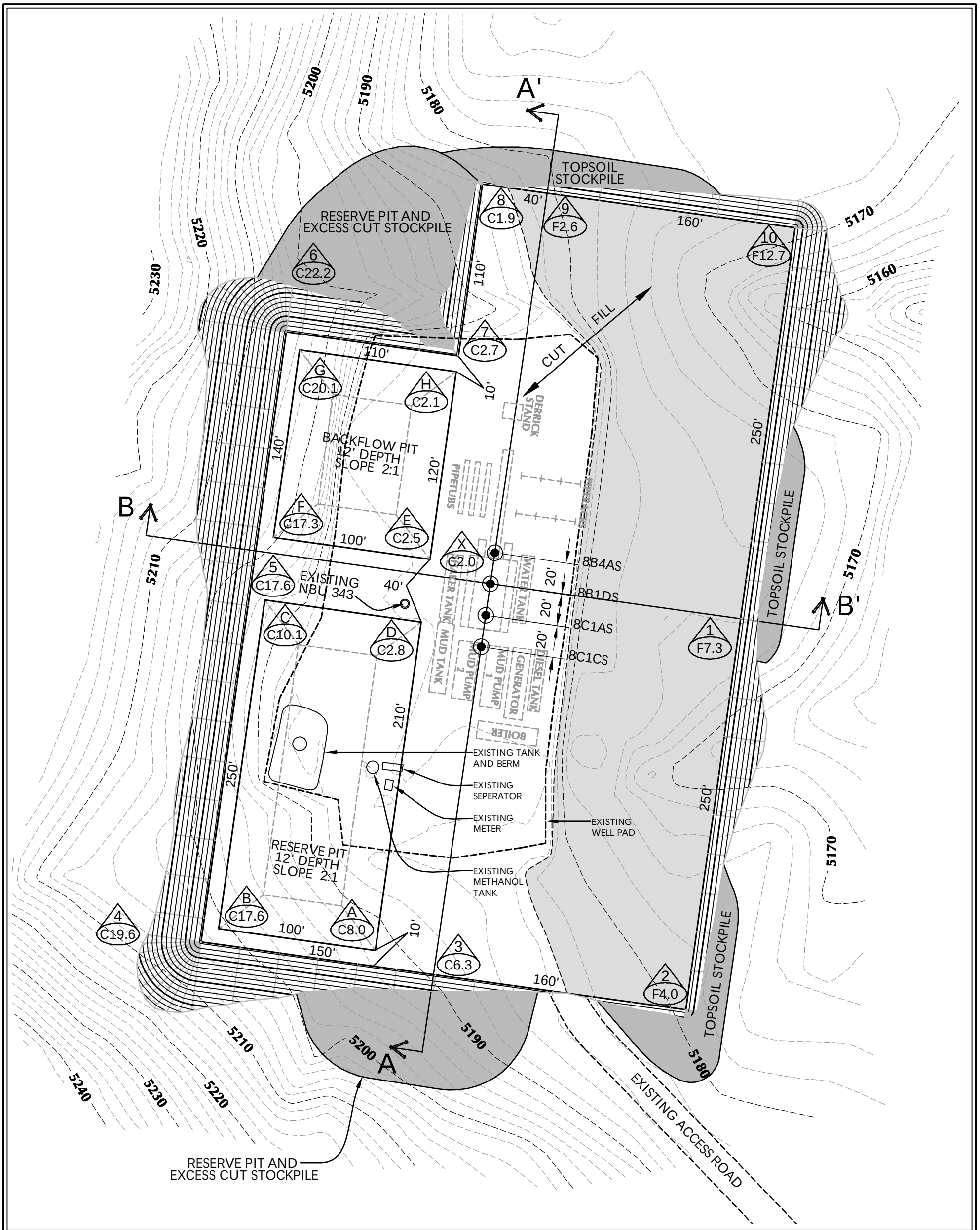
NBU 1022-8C1CS, NBU 1022-8C1AS, NBU 1022-8B1DS & NBU 1022-8B4AS LOCATED IN SECTION 8, T10S, R22E, S.L.B.&M. UINTAH COUNTY, UTAH.

CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

DATE SURVEYED: 09-18-08	SURVEYED BY: M.S.B.
DATE DRAWN: 10-03-08	DRAWN BY: M.W.W.
	REVISED: 01-21-09

Timberline (435) 789–1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

’APIWellNo:43047506420000’



WELL PAD NBU 343 QUANTITIES

EXISTING GRADE @ CENTER OF PAD = 5,185.3'
FINISHED GRADE ELEVATION = 5,183.3'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 20,772 C.Y.
TOTAL FILL FOR WELL PAD = 20,470 C.Y.
TOPSOIL @ 6" DEPTH = 2,343 C.Y.
EXCESS MATERIAL = 302 C.Y.
TOTAL DISTURBANCE = 4.07 ACRES
SHRINKAGE FACTOR = 1.10
SWELL FACTOR = 1.00
RESERVE PIT CAPACITY (2' OF FREEBOARD)
+/- 23,600 BARRELS
RESERVE PIT VOLUME
+/- 6,370 CY
BACKFLOW PIT CAPACITY (2' OF FREEBOARD)
+/- 12,050 BARRELS
BACKFLOW PIT VOLUME
+/- 3,330 CY

WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)

HORIZONTAL 0 30 60 1" = 60'
2' CONTOURS

KERR-MCGEE OIL & GAS
ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202

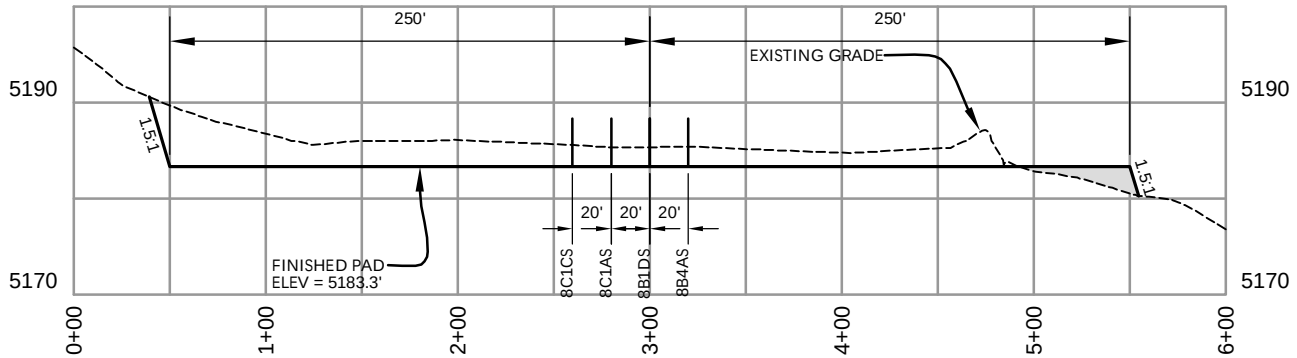
WELL PAD - LOCATION LAYOUT
NBU 1022-8C1CS, NBU 1022-8C1AS,
NBU 1022-8B1DS, NBU 1022-8B4AS
LOCATED IN SECTION 8, T.10S., R.22E.
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

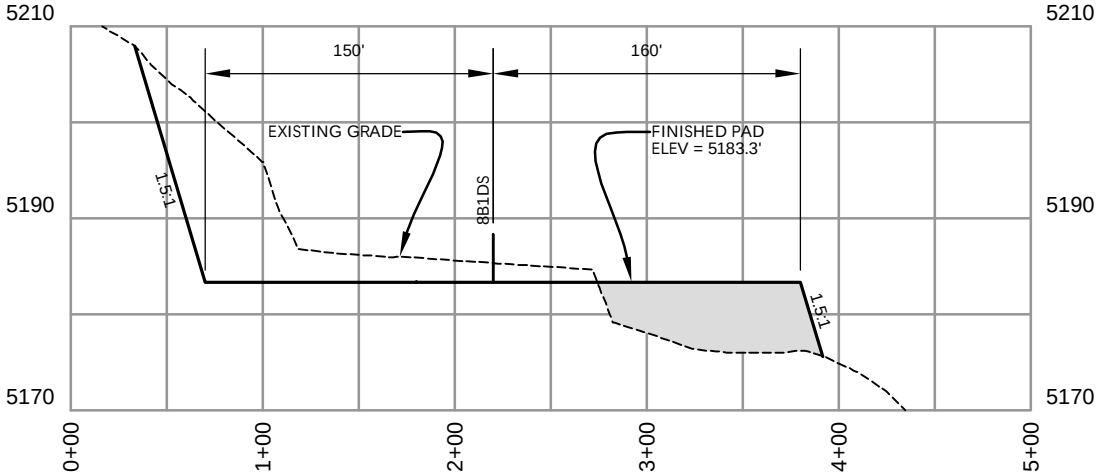
Scale: 1"=60'	Date: 2/5/09	SHEET NO: 6 6 OF 13
REVISED:	BY DATE	

Timberline Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078 (435) 789-1365

K:\ANADARKO\2008_27_NBU_Directional_Wells\DWGS\NBU_DIRECTIONAL_JAN_FEB_2009_CESI.dwg, 2/10/2009 9:15:22 AM, PDF-XChange for AcroPlot Pro



CROSS SECTION A-A'



CROSS SECTION B-B'

KERR-MCGEE OIL & GAS
ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202

WELL PAD - CROSS SECTIONS
NBU 1022-8C1CS, NBU 1022-8C1AS,
NBU 1022-8B1DS, NBU 1022-8B4AS
LOCATED IN SECTION 8, T.10S., R.22E.
S.L.B.&M., UINTAH COUNTY, UTAH

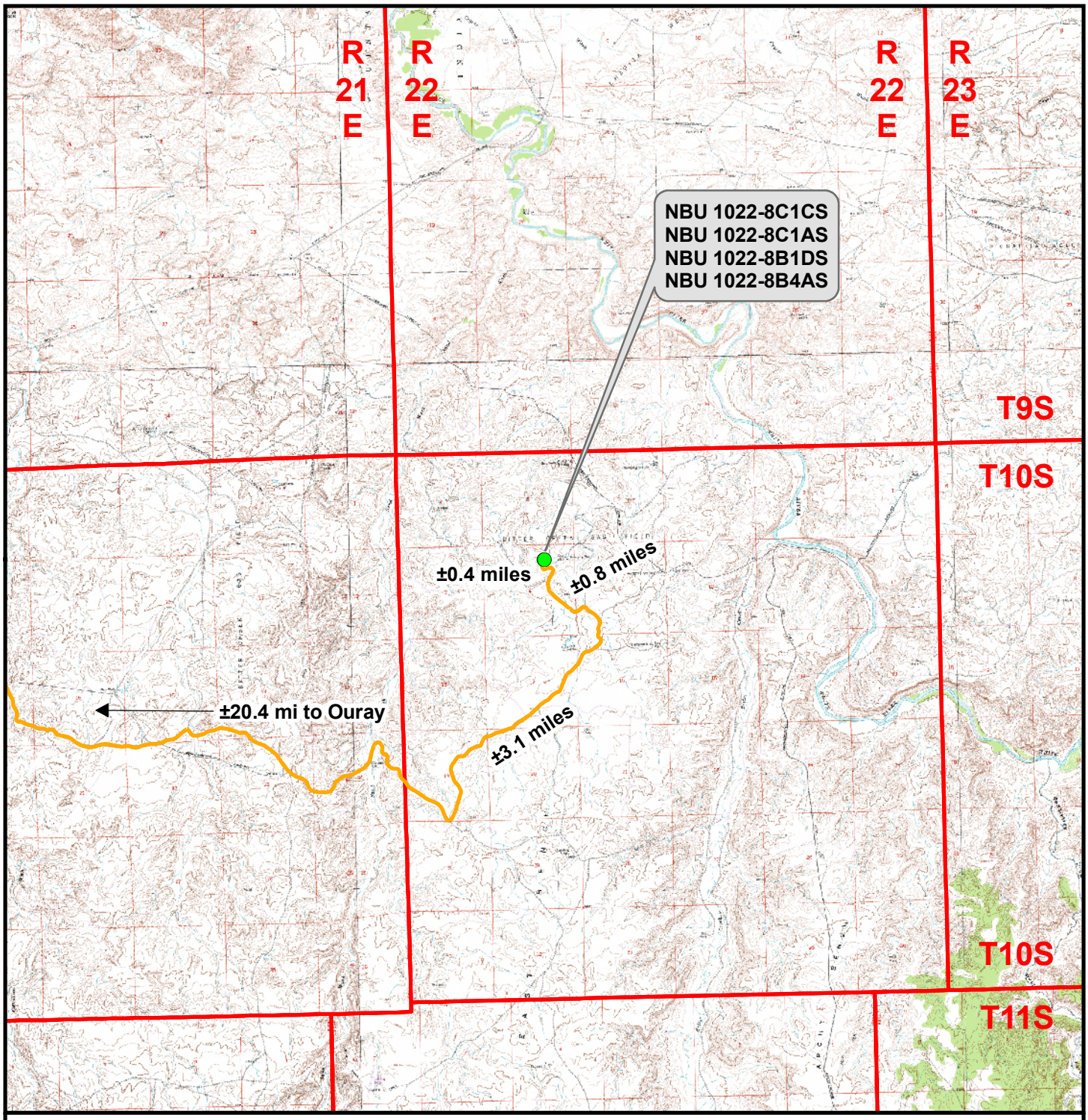
609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

Scale: 1"=100'	Date: 2/5/09	SHEET NO: 7
REVISED:	BY DATE	7 OF 13

HORIZONTAL 0 50 100 1" = 100'
VERTICAL 0 10 20 1" = 20'

Timberline Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078
(435) 789-1365

’APIWellNo:43047506420000’



Legend

- Proposed Well Location
- Access Route - Proposed

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

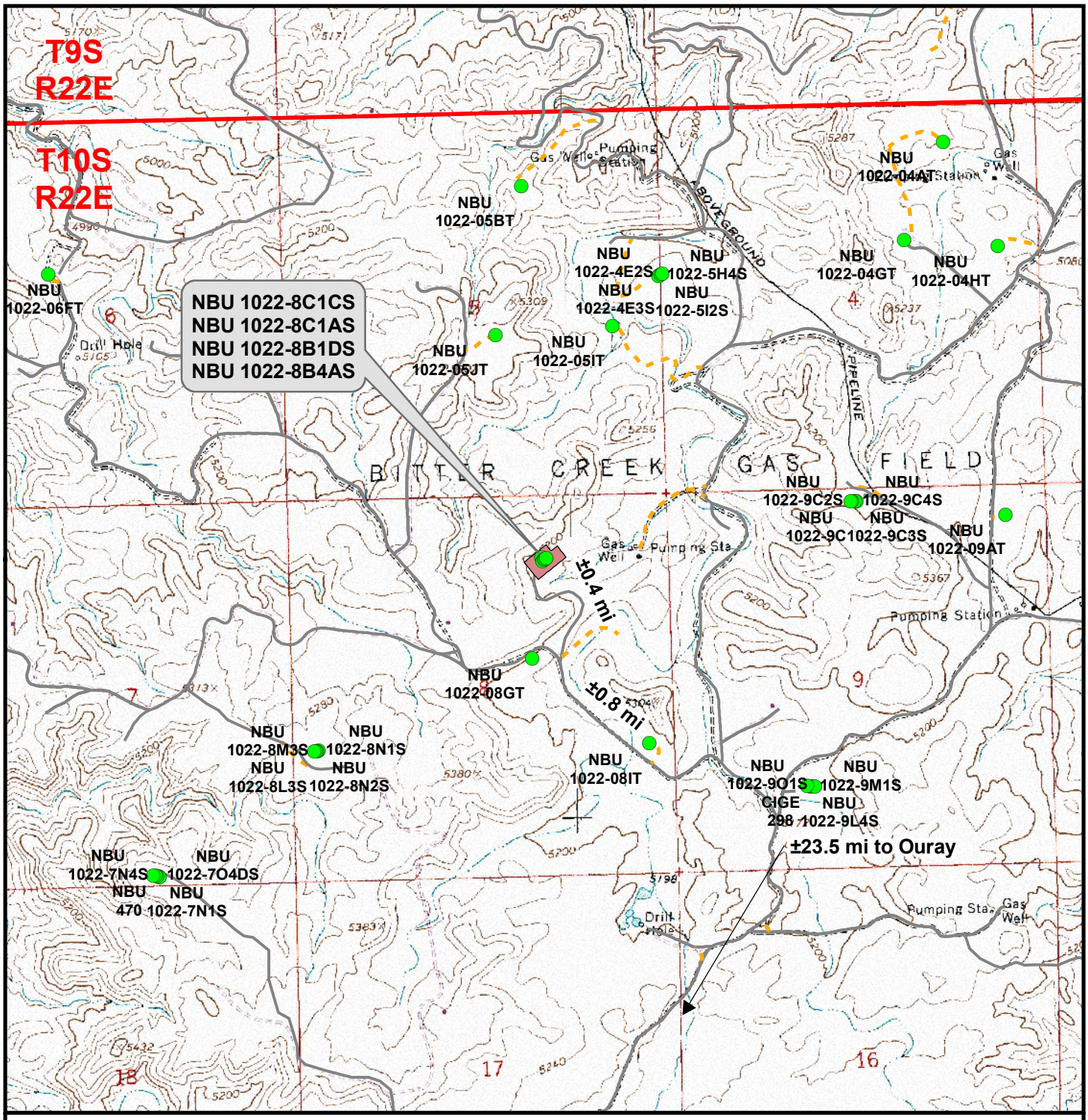
NBU 1022-8C1CS, NBU 1022-8C1AS, NBU 1022-8B1DS & NBU 1022-8B4AS
Topo A
Located In Section 8, T10S, R22E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1:100,000	NAD83 USP Central	Sheet No: 9	9 of 13
Drawn: JELo	Date: 6 Feb 2009		
Revised:	Date:		

’APIWellNo:43047506420000’



Legend

Well - Proposed | Well Pad | Road - Proposed | Road - Existing

Total Proposed Road Length: ±0ft

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

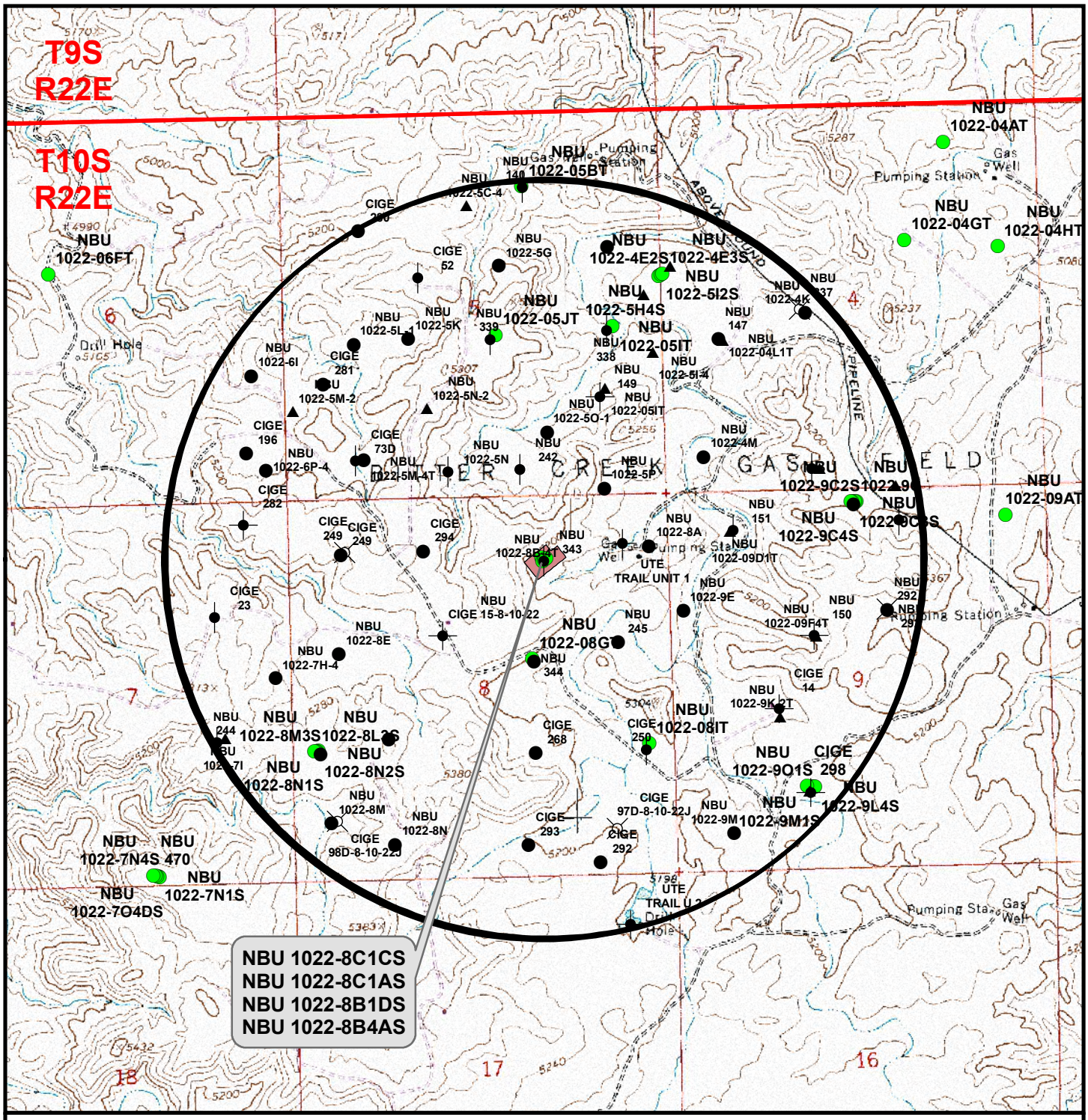
NBU 1022-8C1CS, NBU 1022-8C1AS, NBU 1022-8B1DS & NBU 1022-8B4AS
Topo B
Located In Section 8, T10S, R22E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 10 of 13	
Drawn: JELo	Date: 6 Feb 2009		
Revised:	Date:		

’APIWellNo:43047506420000’



Legend

Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

- Well - Proposed
- Well - 1 Mile Radius
- Producing
- Location Abandoned
- Shut-In
- Well Pad
- Approved permit (APD); not yet spudded
- Temporarily-Abandoned
- Spudded (Drilling commenced: Not yet comple
- Plugged and Abandoned

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

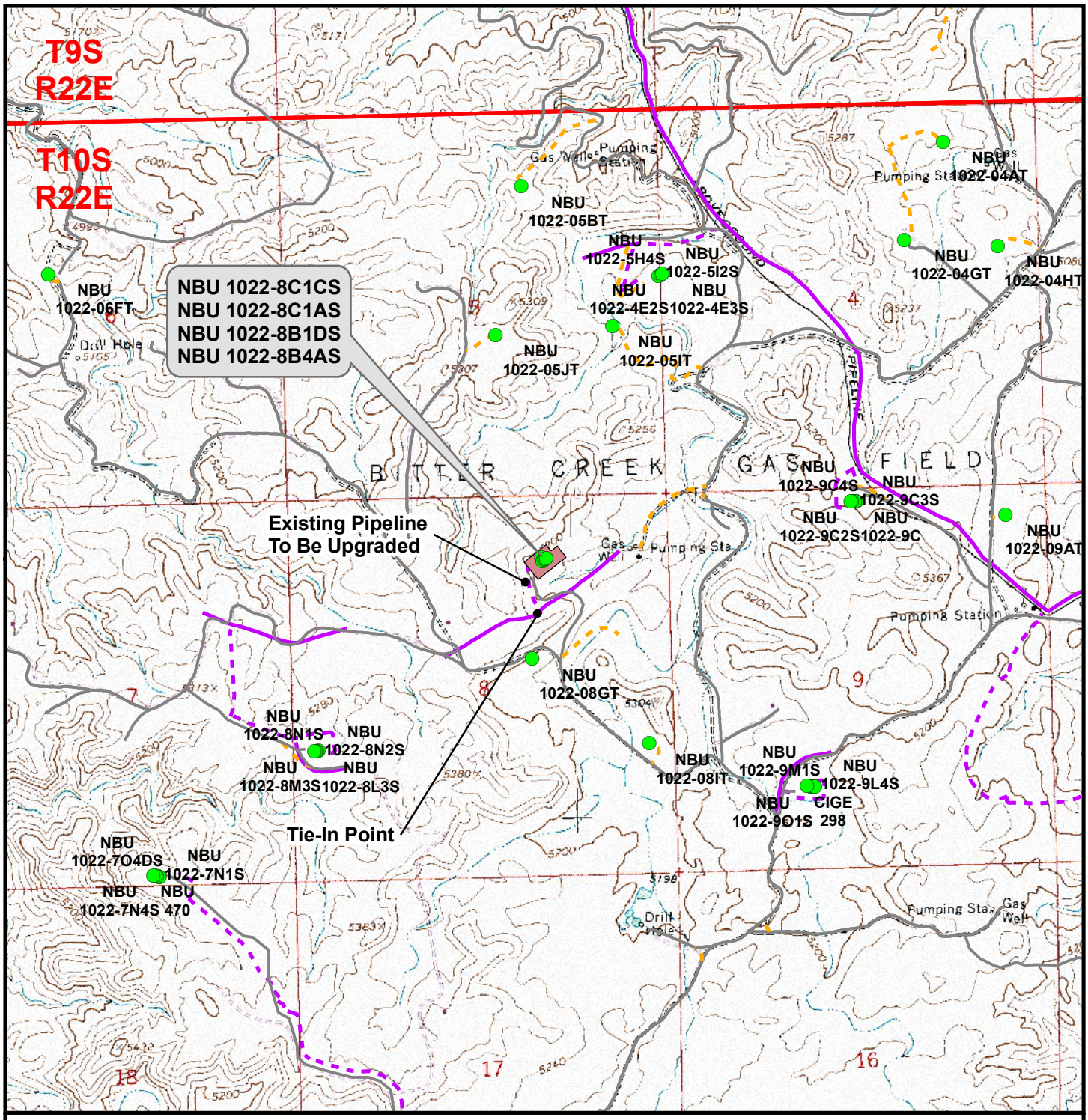
NBU 1022-8C1CS, NBU 1022-8C1AS, NBU 1022-8B1DS & NBU 1022-8B4AS
Topo C
Located In Section 8, T10S, R22E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 11	11 of 13
Drawn: JELo	Date: 6 Feb 2009		
Revised:	Date:		

’APIWellNo:43047506420000’



Legend

Well - Proposed | Well Pad | Road - Proposed | Pipeline - Proposed | Road - Existing | Pipeline - Existing

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±740ft
Proposed Pipeline Length Around Pad: ±660ft

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

NBU 1022-8C1CS, NBU 1022-8C1AS, NBU 1022-8B1DS & NBU 1022-8B4AS
Topo D
Located In Section 8, T10S, R22E
S.L.B.&M., Uintah County, Utah

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 12	12 of 13
Drawn: JELo	Date: 6 Feb 2009		
Revised:	Date:		

'APIWellNo:43047506420000'

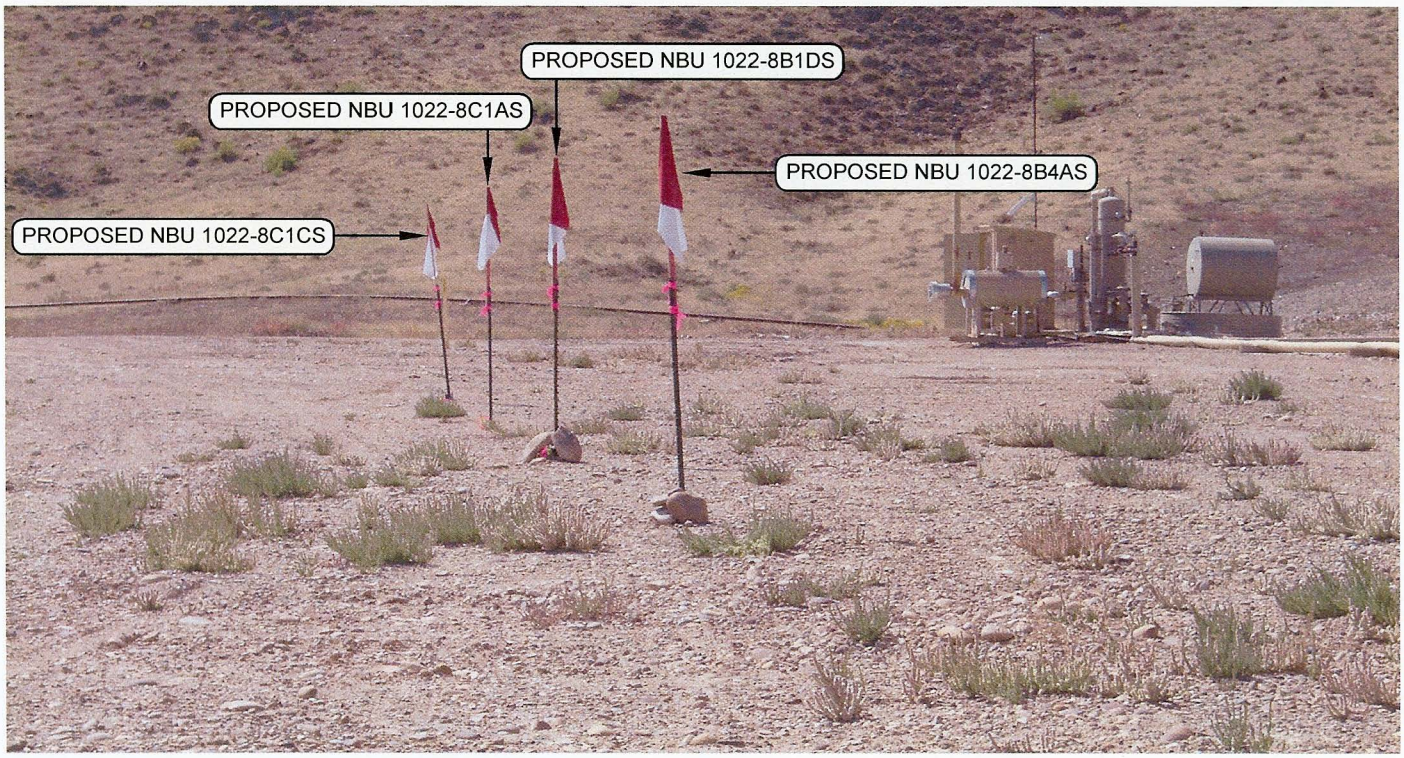


PHOTO VIEW: TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY

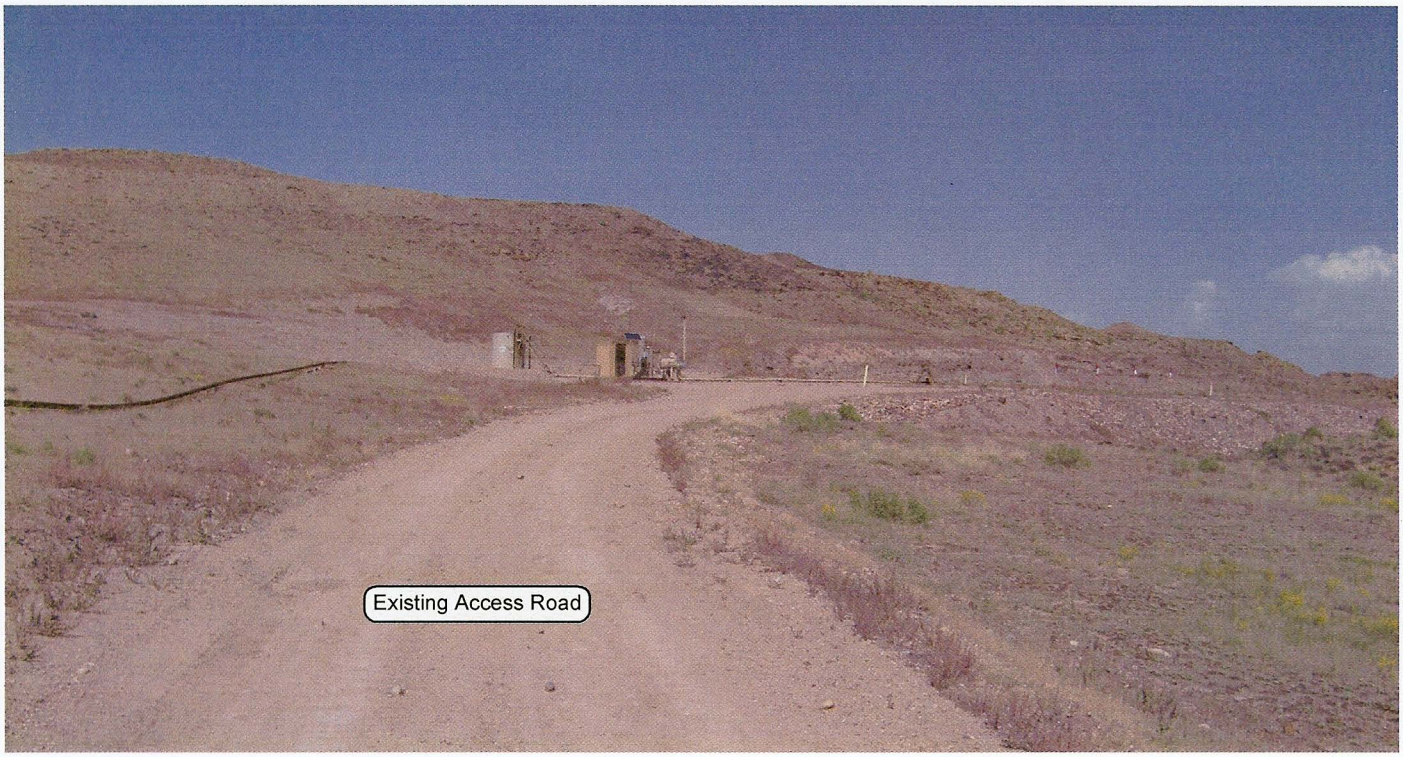


PHOTO VIEW: FROM EXISTING ROAD

CAMERA ANGLE: NORTHEASTERLY

Kerr–McGee
Oil & Gas Onshore, LP
1099 18th Street – Denver, Colorado 80202

NBU 1022-8C1CS, NBU 1022-8C1AS,
NBU 1022-8B1DS & NBU 1022-8B4AS
LOCATED IN SECTION 8, T10S, R22E,
S.L.B.&M. UINTAH COUNTY, UTAH.

609
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

LOCATION PHOTOS		DATE TAKEN: 09-18-08
		DATE DRAWN: 10-03-08
TAKEN BY: M.S.B.	DRAWN BY: M.W.W.	REVISED:

Timberline (435) 789–1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

SHEET
8
OF 13

Kerr-McGee Oil & Gas Onshore, LP
NBU 1022-8C1CS, NBU 1022-8C1AS, NBU 1022-8B1DS & NBU 1022-8B4AS
Section 8, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 11.2 MILES TO THE INTERSECTION OF THE GLEN BENCH ROAD (COUNTY B ROAD 3260). EXIT LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION ALONG THE GLEN BENCH ROAD APPROXIMATELY 5.2 MILES TO THE INTERSECTION OF THE BITTER CREEK ROAD (COUNTY B ROAD 4120). EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG THE BITTER CREEK ROAD APPROXIMATELY 4.0 MILES TO A CLASS D COUNTY ROAD RUNNING NORTHEASTERLY. EXIT LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION ALONG THE CLASS D COUNTY ROAD APPROXIMATELY 3.1 MILES TO A SECOND CLASS D COUNTY ROAD RUNNING NORTHWESTERLY. EXIT LEFT AND PROCEED NORTHWESTERLY ALONG THE SECOND CLASS D COUNTY ROAD APPROXIMATELY 0.8 MILES TO AN EXISTING SERVICE ROAD RUNNING NORTHERLY. EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 0.4 MILES TO THE EXISTING WELL PAD.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 55.4 MILES IN A SOUTHERLY DIRECTION.

’APIWellNo:43047506420000’

NBU 1022-8B1DS
Surface: 931’ FNL 1,709’ FEL (NW/4NE/4)
BHL: 367’ FNL 1,518’ FEL (NW/4NE/4)
Mineral Lease: UTU 01196C

NBU 1022-8B4AS
Surface: 919’ FNL 1,693’ FEL (NW/4NE/4)
BHL: 744’ FNL 1,518’ FEL (NW/4NE/4)
Mineral Lease: UTU 01196C

NBU 1022-8C1AS
Surface: 943’ FNL 1,725’ FEL (NW/4NE/4)
BHL: 102’ FNL 2,415’ FWL (NE/4NW/4)
Mineral Lease: UTU 0466

NBU 1022-8C1CS
Surface: 955’ FNL 1,742’ FEL (NW/4NE/4)
BHL: 418’ FNL 2,252’ FWL (NE/4NW/4)
Mineral Lease: UTU 0466

Pad: NBU 1022-8B
Sec. 8 T10S R22E

Uintah, Utah

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN SUBMITTED WITH SITE-SPECIFIC INFORMATION

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents. An NOS was submitted on March 17, 2009 showing the surface locations in NW/4 NE/4 of Section 8 T10S R22E.

This Surface Use Plan of Operations (SUPO) or 13-point plan provides the site-specific information for the above-referenced wells. This information is to be incorporated by reference into the Master Development Plan (MDP) for Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee). The MDP is available upon request from the BLM-Vernal Field Office.

An on-site meeting was held on March 31, 2009. Present were:

- Verlyn Pindell, Dave Gordon – BLM;
- Kolby Kay – 609 Consulting, LLC
- Tony Kazeck, Raleen White, Sheila Upchego, Grizz Oleen, Hal Blanchard, Charles Chase and Jeff Samuels – Kerr-McGee.

Directional Drilling:
In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, this well will be directionally drilled in order to access portions of our lease which are otherwise inaccessible due to topography.

1. Existing Roads:
A) Refer to Topo Map A for directions to the location.
B) Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. Planned Access Roads:
See MDP for additional details on road construction.
No new access road is proposed. Please refer to the attached Topo Map B. No pipelines will be crossed with the new construction.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site and are typically shown on the attached Exhibits and Topo maps.

3. Location of Existing Wells Within a 1-Mile Radius:
Please refer to Topo Map C.

4. Location of Existing and Proposed Facilities:
See MDP for additional details on Existing and Proposed Facilities.

This pad will expand the existing pad for the NBU 343, which is a shut-in well according to Utah Division of Oil, Gas and Mining (UDOGM) records.

The following guidelines will apply if the well is productive.
Approximately ±1,400' (±0.27 miles) of pipeline is proposed. The existing pipeline, as shown on Topo D, will be upgraded to accommodate anticipated production from the proposed wells. The upgraded pipeline will follow the same route as the existing pipeline. Pipeline segments will be welded or zaplocked together on disturbed areas in or near the location, whenever possible, and dragged into place.

5. Location and Type of Water Supply:
See MDP for additional details on Location and Type of Water Supply.

Water for drilling purposes will be obtained from one of the following sources:
- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. **Source of Construction Materials:**
See MDP for additional details on Source of Construction Materials.

7. **Methods of Handling Waste Materials:**
See MDP for additional details on Methods of Handling Waste Materials.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E
NBU #159 in Sec. 35 T9S R21E
Ace Oilfield in Sec. 2 T6S R20E
MC&MC in Sec. 12 T6S R19E
Pipeline Facility in Sec. 36 T9S R20E
Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E
Bonanza Evaporation Pond in Sec. 2 T10S R23E

8. **Ancillary Facilities:**
See MDP for additional details on Ancillary Facilities.

None are anticipated.

9. **Well Site Layout:** (See Location Layout Diagram)
See MDP for additional details on Well Site Layout.

All pits will be fenced according to the following minimum standards:

- Net wire (39-inch) will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.
- Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.
- All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

10. **Plans for Reclamation of the Surface:**
See MDP for additional details on Plans for Reclamation of the Surface.

11. **Surface/Mineral Ownership:**
United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
(435)781-4400

12. Other Information:

See MDP for additional details on Other Information.

13. **Lessee's or Operators' Representative & Certification:**

Kathy Schneebeck Dulnoan
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6007

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Kathy Schneebeck Dulnoan

Kathy Schneebeck Dulnoan

August 13, 2009
Date

Kerr-McGee Oil & Gas Onshore LP

1099 18th Street, Suite 1800
Denver, CO 80202-1918
P.O. Box 173779
Denver, CO 80217-3779
720-929-6000

April 8, 2009

Mrs. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11
NBU 1022-8C1AS
T10S-R22E
Section 8: NENW
Surface: 943' FNL, 1725' FEL
Bottom Hole: 102' FNL, 2415' FWL
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-8C1AS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Jason K. Rayburn
Landman

'APIWellNo:43047506420000'

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP'S 55 PROPOSED WELL LOCATIONS IN TOWNSHIP 10S, RANGE 22E, SECTIONS 4, 7, 8, 9, 10, 18 AND 20, UINTAH COUNTY, UTAH

By:

Patricia Stavish

Prepared For:
Bureau of Land Management
Vernal Field Office
and
State of Utah
School & Institutional Trust Lands Administration

Prepared Under Contract With:

Kerr-McGee Oil and Gas Onshore LP
1368 South 1200 East
Vernal, Utah 84078

Prepared By:

Montgomery Archaeological Consultants, Inc.
P.O. Box 219
Moab, Utah 84532

MOAC Report No. 08-321

February 20, 2009

United States Department of Interior (FLPMA)
Permit No. 08-UT-60122

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

IPC #08-279

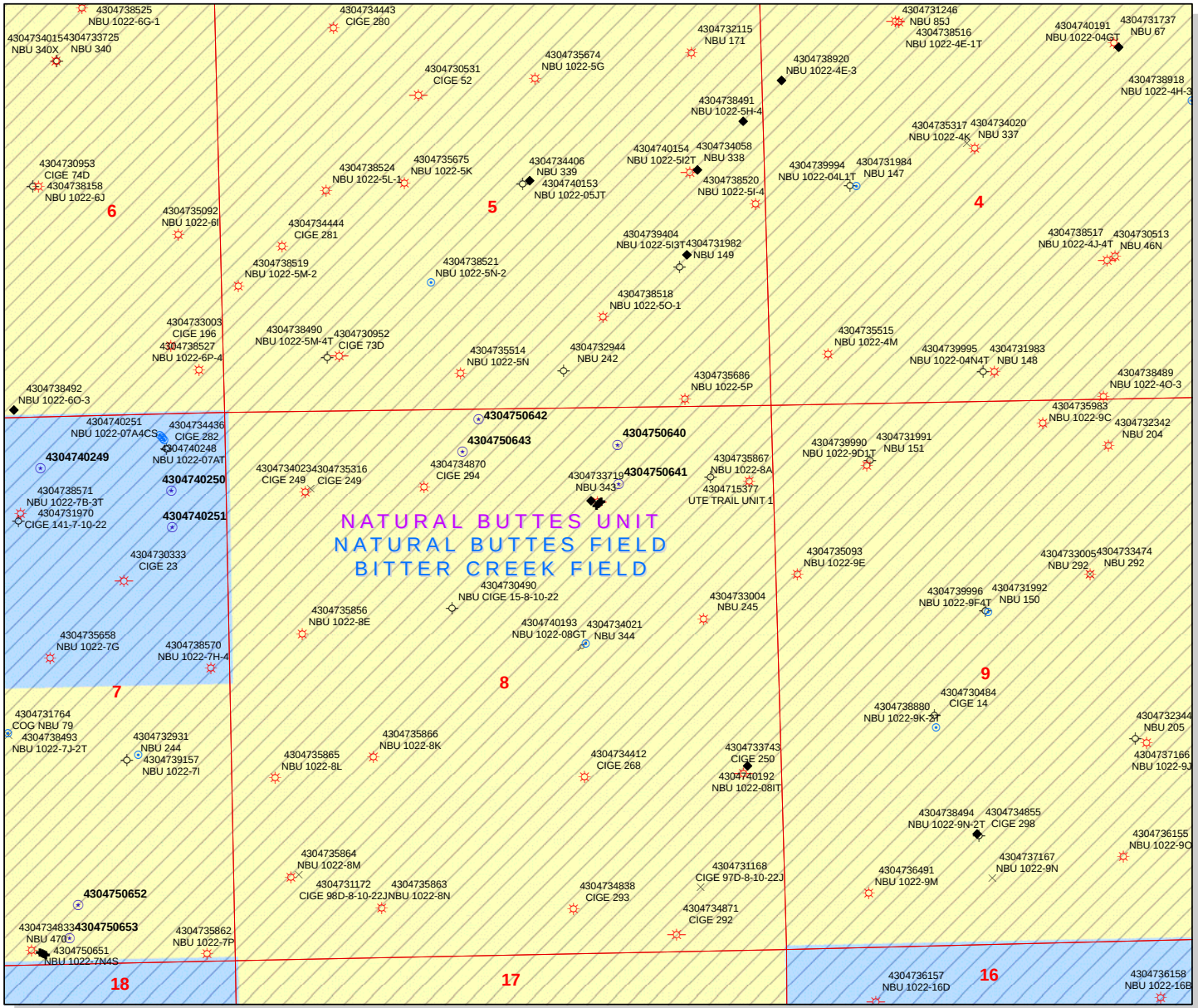
Paleontological Reconnaissance Survey Report

Survey of Kerr McGee's Proposed Directional Wells and Pipeline for "NBU #1022-8C1CS, 8C1AS, 8B1DS, & 8B4AS" (Sec. 8, T 10 S, R 22 E)

Archy Bench
Topographic Quadrangle
Uintah County, Utah

December 1, 2008

Prepared by Stephen D. Sandau
Paleontologist for
Intermountain Paleo-Consulting
P. O. Box 1125
Vernal, Utah 84078



API Number: 4304750642

Well Name: NBU 1022-8C1AS

Township 10.0 S Range 22.0 E Section 8

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
ACTIVE
EXPLORATORY
GAS STORAGE
NF PP OIL
NF SECONDARY
PI OIL
PP GAS
PP GEOTHERML
PP OIL
SECONDARY
TERMINATED
Fields
STATUS
ACTIVE
COMBINED
Sections

Wells Query Events
<all other values>
GIS_STAT_TYPE
<Null>
APD
DRL
GI
GS
LA
NEW
OPS
PA
PGW
POW
RET
SGW
SOW
TA
TW
WD
WI
WS

1,200 600 0 1,200 Feet

1:12,000

'APIWellNo:43047506420000'

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

August 28, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2009 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2009 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-50640	NBU 1022-8B1DS	Sec 08 T10S R22E 0931 FNL 1709 FEL
	BHL	Sec 08 T10S R22E 0367 FNL 1518 FEL
43-047-50641	NBU 1022-8B4AS	Sec 08 T10S R22E 0919 FNL 1693 FEL
	BHL	Sec 08 T10S R22E 0744 FNL 1518 FEL
43-047-50642	NBU 1022-8C1AS	Sec 08 T10S R22E 0943 FNL 1725 FEL
	BHL	Sec 08 T10S R22E 0102 FNL 2415 FWL
43-047-50643	NBU 1022-8C1CS	Sec 08 T10S R22E 0955 FNL 1742 FEL
	BHL	Sec 08 T10S R22E 0418 FNL 2252 FWL
43-047-50644	NBU 922-30C3S	Sec 30 T09S R22E 1253 FNL 0663 FWL
	BHL	Sec 30 T09S R22E 1238 FNL 1154 FWL
43-047-50645	NBU 922-30D3AS	Sec 30 T09S R22E 1232 FNL 0607 FWL
	BHL	Sec 30 T09S R22E 0680 FNL 0382 FWL
43-047-50646	NBU 921-30C3CS	Sec 30 T09S R21E 0783 FNL 0920 FWL
	BHL	Sec 30 T09S R21E 0993 FNL 1985 FWL
43-047-50647	NBU 921-30D2DS	Sec 30 T09S R21E 0747 FNL 0871 FWL
	BHL	Sec 30 T09S R21E 0460 FNL 0665 FWL

API #	WELL NAME	LOCATION

(Proposed PZ WASATCH-MESA VERDE)

43-047-50648 NBU 921-30D3DS Sec 30 T09S R21E 0759 FNL 0887 FWL
BHL Sec 30 T09S R21E 1152 FNL 0665 FWL

43-047-50649 NBU 921-30E2AS Sec 30 T09S R21E 0771 FNL 0903 FWL
BHL Sec 30 T09S R21E 1522 FNL 0665 FWL

43-047-50650 NBU 1022-7N1S Sec 07 T10S R22E 0089 FSL 1920 FEL
BHL Sec 07 T10S R22E 0895 FSL 1870 FWL

43-047-50651 NBU 1022-7N4S Sec 07 T10S R22E 0097 FSL 1938 FEL
BHL Sec 07 T10S R22E 0595 FSL 1740 FWL

43-047-50652 NBU 1022-7O4AS Sec 07 T10S R22E 0081 FSL 1902 FEL
BHL Sec 07 T10S R22E 0550 FSL 1560 FEL

43-047-50653 NBU 1022-7O4DS Sec 07 T10S R22E 0074 FSL 1883 FEL
BHL Sec 07 T10S R22E 0230 FSL 1650 FEL

43-047-50655 NBU 922-30D3DS Sec 30 T09S R22E 1226 FNL 0588 FWL
BHL Sec 30 T09S R22E 1314 FNL 0352 FWL

43-047-50656 NBU 922-30E2AS Sec 30 T09S R22E 1246 FNL 0645 FWL
BHL Sec 30 T09S R22E 1636 FNL 0352 FWL

43-047-50678 NBU 922-31G4BS Sec 31 T09S R22E 2317 FSL 0188 FEL
BHL Sec 31 T09S R22E 1994 FNL 1808 FEL

43-047-50679 NBU 922-31G4CS Sec 31 T09S R22E 2316 FSL 0198 FEL
BHL Sec 31 T09S R22E 2353 FNL 1796 FEL

43-047-50680 NBU 922-31I1AS Sec 31 T09S R22E 2317 FSL 0178 FEL
BHL Sec 31 T09S R22E 2483 FSL 0243 FEL

43-047-50681 NBU 922-31I1DS Sec 31 T09S R22E 2317 FSL 0168 FEL
BHL Sec 31 T09S R22E 2137 FSL 0264 FEL

43-047-50682 NBU 921-12J Sec 12 T09S R21E 1959 FSL 2051 FEL

43-047-50684 NBU 1022-6I3AS Sec 06 T10S R22E 1160 FSL 1584 FEL
BHL Sec 06 T10S R22E 1684 FSL 1167 FEL

43-047-50685 NBU 1022-6J4CS Sec 06 T10S R22E 1178 FSL 1593 FEL
BHL Sec 06 T10S R22E 1535 FSL 1760 FEL

43-047-50686 NBU 1022-6O1BS Sec 06 T10S R22E 1124 FSL 1567 FEL
BHL Sec 06 T10S R22E 1197 FSL 1811 FEL

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-50687	NBU 1022-6P1CS	Sec 06 T10S R22E 1142 FSL 1575 FEL BHL Sec 06 T10S R22E 0989 FSL 0541 FEL
43-047-50691	NBU 921-29A3AS	Sec 29 T09S R21E 0299 FNL 2630 FEL BHL Sec 29 T09S R21E 0700 FNL 0885 FEL
43-047-50692	NBU 921-29A3DS	Sec 29 T09S R21E 0303 FNL 2628 FWL BHL Sec 29 T09S R21E 1193 FNL 0885 FEL
43-047-50694	NBU 921-29A2AS	Sec 29 T09S R21E 0296 FNL 2611 FEL BHL Sec 29 T09S R21E 0209 FNL 0885 FEL
43-047-50693	NBU 921-29B2CS	Sec 29 T09S R21E 0307 FNL 2608 FWL BHL Sec 29 T09S R21E 0443 FNL 2635 FEL
43-047-50695	NBU 921-12N	Sec 12 T09S R21E 0441 FSL 2236 FWL
43-047-50698	NBU 921-19F	Sec 19 T09S R21E 2236 FNL 2285 FWL
43-047-50699	NBU 921-17C	Sec 17 T09S R21E 0656 FNL 2004 FWL
43-047-50700	NBU 921-17D	Sec 17 T09S R21E 0985 FNL 0418 FWL
43-047-50701	NBU 921-17G	Sec 17 T09S R21E 1500 FNL 2262 FEL
43-047-50702	NBU 921-17H	Sec 17 T09S R21E 2100 FNL 0553 FEL
43-047-50703	NBU 921-18P	Sec 18 T09S R21E 1080 FSL 0197 FEL
43-047-50704	NBU 921-19E	Sec 19 T09S R21E 2061 FNL 0842 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron

Fluid Chron

MCoulthard:mc:8-28-09

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/17/2009 **API NO. ASSIGNED:** 43047506420000

WELL NAME: NBU 1022-8C1AS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: NWNE 8 100S 220E **Permit Tech Review:** ☑

SURFACE: 0943 FNL 1725 FEL **Engineering Review:** ☑

BOTTOM: 0102 FNL 2415 FWL **Geology Review:** ☑

COUNTY: UINTAH

LATITUDE: 39.96808 **LONGITUDE:** -109.45969

UTM SURF EASTINGS: 631548.00 **NORTHINGS:** 4425141.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU 0466 **PROPOSED PRODUCING FORMATION(S):** WASATCH-MESA VERDE

SURFACE OWNER: 1 - Federal **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - WYB000291
- ☐ **Potash**
- ☑ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** Permit #43-8496
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☑ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit: NATURAL BUTTES

- ☐ **R649-3-2. General**
- ☑ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: Cause 173-14

Effective Date: 12/2/1999

Siting: 460' fr u bdry & uncomm. tract

- ☑ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:

1 - Exception Location - dmason
3 - Commingling - ddoucet
4 - Federal Approval - dmason
15 - Directional - dmason
17 - Oil Shale 190-5(b) - dmason

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill
****

Well Name: NBU 1022-8C1AS
API Well Number: 43047506420000
Lease Number: UTU 0466
Surface Owner: FEDERAL
Approval Date: 8/31/2009

Issued to:
KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Exception Location:
Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

Commingle:
In accordance with Board Cause No. 173-14 commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale

Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

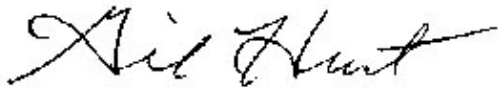
Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov

Reporting Requirements:
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:



Gil Hunt
Associate Director, Oil & Gas

API Well No: 43047506420000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-8C1AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047506420000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0943 FNL 1725 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 08 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/31/2010	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: August 31, 2010

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst
SIGNATURE N/A		**DATE** 8/30/2010

RECEIVED August 30, 2010

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506420000

API: 43047506420000
Well Name: NBU 1022-8C1AS
Location: 0943 FNL 1725 FEL QTR NWNE SEC 08 TWNP 100S RNG 220E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 8/31/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Approved by the Utah Division of Oil, Gas and Mining

Signature: Danielle Piernot **Date:** 8/30/2010
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: August 31, 2010

By:

RECEIVED August 30, 2010

Form 3160-3
(August 2007)

UDOGM

RECEIVED
AUG 25 2009

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
UTU466

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
891008900A

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

8. Lease Name and Well No.
NBU 1022-8C1AS

2. Name of Operator
KERRMCGEE OIL&GAS ONSHORE LP

Contact: DANIELLE E PIERNOT
Mail: Danielle.Piernot@anadarko.com

9. API Well No.
43-047-50642

3a. Address
PO BOX 173779
DENVER, CO 80202-3779

3b. Phone No. (include area code)
Ph: 720-929-6156
Fx: 720-929-7156

10. Field and Pool, or Exploratory
NATURAL BUTTES

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface NWNE 943FNL 1725FEL 39.96815 N Lat, 109.46039 W Lon

At proposed prod. zone NENW 102FNL 2415FWL 39.97045 N Lat, 109.46447 W Lon

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 8 T10S R22E Mer SLB

14. Distance in miles and direction from nearest town or post office*
APPROXIMATELY 25 MILES SOUTHEAST OF OURAY, UTAH

12. County or Parish
UINTAH

13. State
UT

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
102 FEET

16. No. of Acres in Lease
454.00

17. Spacing Unit dedicated to this well

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.
APPROXIMATELY 360 FEET

19. Proposed Depth
9503 MD
9100 TVD

20. BLM/BIA Bond No. on file
WYB000291

21. Elevations (Show whether DF, KB, RT, GL, etc.
5185 GL

22. Approximate date work will start
08/31/2009

23. Estimated duration
60-90 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature
(Electronic Submission)

Name (Printed/Typed)
DANIELLE E PIERNOT Ph: 720-929-6156

Date
08/17/2009

Title
REGULATORY ANALYST

Approved by (Signature)

Name (Printed/Typed)
Jerry Kenczka

Date
APR 07 2011

Title
Assistant Field Manager
Lands & Mineral Resources

Office
VERNAL FIELD OFFICE

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #73334 verified by the BLM Well Information System
For KERRMCGEE OIL&GAS ONSHORE LP, sent to the Vernal
Committed to AFMSS for processing by ROBIN R. HANSEN on 08/18/2009 ()

RECEIVED
APR 13 2011
DIV. OF OIL, GAS & MINING

UDOGM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

09SXS0352A

NOS - 12-8-08

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-440

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Kerr McGee Oil & Gas Onshore, LP**	**Location:**	**NWNE, Sec. 8, T10S, R22E (S) NENW, Sec. 8, T10S, R22E (B)**
Well No:	**Bonanza 1022-8C1AS**	**Lease No:**	**UTU-466**
API No:	**43-047-50642**	**Agreement:**	**Natural Buttes Unit**

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.

- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.

- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

SITE SPECIFIC COAs:

- During operation, if any vertebrate paleontological resources are discovered, in accordance with **Section 6 of Form 3100-11** and **43 CFR 3162.1,** all operations affecting such sights shall be immediately suspended, and all discoveries shall be left intact until authorized to proceed by the Authorized Officer. The appropriate Authorized Officer of the Vernal BLM office shall be notified within 48 hours of the discovery, and a decision as to the preferred alternative/course of action will be rendered.

- Kerr McGee will adhere to all applicant committed conservation measures and conservation recommendations that are stated in the USFWS's "Final Biological Opinion for the Anadarko Petroleum Corporation Natural Buttes Unit and Bonanza Area Natural Gas Development Project.

- The operator will follow the Green River District Reclamation Guidelines for Reclamation.

- The operator will control noxious weeds along the well pad, access road, and the pipeline route by spraying or mechanical removal. On BLM administered land, a Pesticides Use Proposal (PUP) will be submitted and approved prior to the application of herbicides or pesticides or possibly hazardous chemicals.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or work-over program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.
    - Well name and number.
    - Well location (¼¼, Sec., Twn, Rng, and P.M.).
    - Date well was placed in a producing status (date of first production for which royalty will be paid).
    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
    - Unit agreement and/or participating area name and number, if applicable.
    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-8C1AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047506420000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6515 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0943 FNL 1725 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 08 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 7/12/2011	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 07/12/2011

By: 

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 7/12/2011

RECEIVED Jul. 12, 2011

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506420000

API: 43047506420000
Well Name: NBU 1022-8C1AS
Location: 0943 FNL 1725 FEL QTR NWNE SEC 08 TWNP 100S RNG 220E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 8/31/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Andy Lytle **Date:** 7/12/2011
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

RECEIVED Jul. 12, 2011

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-8C1AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047506420000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0943 FNL 1725 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 08 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☑ SPUD REPORT Date of Spud: 1/26/2012	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU TRIPPLE A BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 01/26/2012 AT 1030 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
January 30, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Sheila Wopsock	435 781-7024	Regulatory Analyst
SIGNATURE		**DATE**
N/A		1/30/2012

RECEIVED: Jan. 30, 2012

SUBMIT AS EMAIL | Print Form

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
Submitted By SHEILA WOPSOCK Phone Number 435.781.7024
Well Name/Number NBU 1022-8C1AS
Qtr/Qtr NW/NE Section 8 Township 10S Range 22E
Lease Serial Number UTU-0466
API Number 4304750642

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 01/26/2012 1000 HRS. AM ☑ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☑ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 02/06/2012 0800 HRS AM ☑ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

RECEIVED
JAN 2 5 2012
DIV. OF OIL, GAS & MINING

Date/Time _____ _____ AM ☐ PM ☐

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT ~~LOVEL YOUNG AT 435.781.7051 FOR MORE~~

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP
Operator Account Number: N 2995
Address: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078
Phone Number: (435) 781-7024

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750643	NBU 1022-8C1CS		NWNE	8	10S	22E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	2900	1/26/2012			1/31/12	

Comments: MIRU TRIPPLE A BUCKET RIG. WSMVD
SPUD WELL ON 01/26/2012 AT 0730 HRS. BHL: NENW

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750642	NBU 1022-8C1AS		NWNE	8	10S	22E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	2900	1/26/2012			1/31/12	

Comments: MIRU TRIPPLE A BUCKET RIG. WSMVD
SPUD WELL ON 01/26/2012 AT 1030 HRS. BHL NENW

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750640	NBU 1022-8B1DS		NWNE	8	10S	22E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
	99999	2900	1/26/2012			1/31/12	

Comments: MIRU TRIPPLE A BUCKET RIG. WSMVD
SPUD WELL ON 01/26/2012 AT 1330 HRS. BHL NWNE

ACTION CODES:
- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA WOPSOCK
Name (Please Print)
Signature
REGULATORY ANALYST
Title
1/30/2012
Date

(5/2000)

RECEIVED
JAN 30 2012
DIV. OF OIL, GAS & MINING

Sundry Number: 23868 API Well Number: 43047506420000

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-8C1AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047506420000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0943 FNL 1725 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 08 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 3/13/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	✓ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The operator requests approval to deepen the well to the Blackhawk formation (part of the Mesaverde Group). The Operator also requests approval for closed loop drilling option, a surface casing change, and a production casing change. All other aspects of the previously approved drilling plan will not change. Please see the attachment. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: March 22, 2012

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE N/A		**DATE** 3/13/2012

RECEIVED: Mar. 13, 2012

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-8C1AS

Surface:	943 FNL / 1725 FEL	NWNE
BHL:	102 FNL / 2415 FWL	NENW

Section 8 T10S R22E

Unitah County, Utah
Mineral Lease: UTU-0466

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. & 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Formation	Depth	Resource
Uinta	0 - Surface	
Green River	1,165'	
Birds Nest	1,545'	Water
Mahogany	1,995'	Water
Wasatch	4,415'	Gas
Mesaverde	6,951'	Gas
Sego	9,101'	Gas
Castlegate	9,177'	Gas
Blackhawk	9,611'	Gas
TVD	10,211'	
TD	10,473'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

RECEIVED: Mar. 13, 2012

7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 10211' TVD, approximately equals 6,739 psi (0.66 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,539 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may

be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

RECEIVED: Mar. 13, 2012

Variance for FIT Requirements
KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.

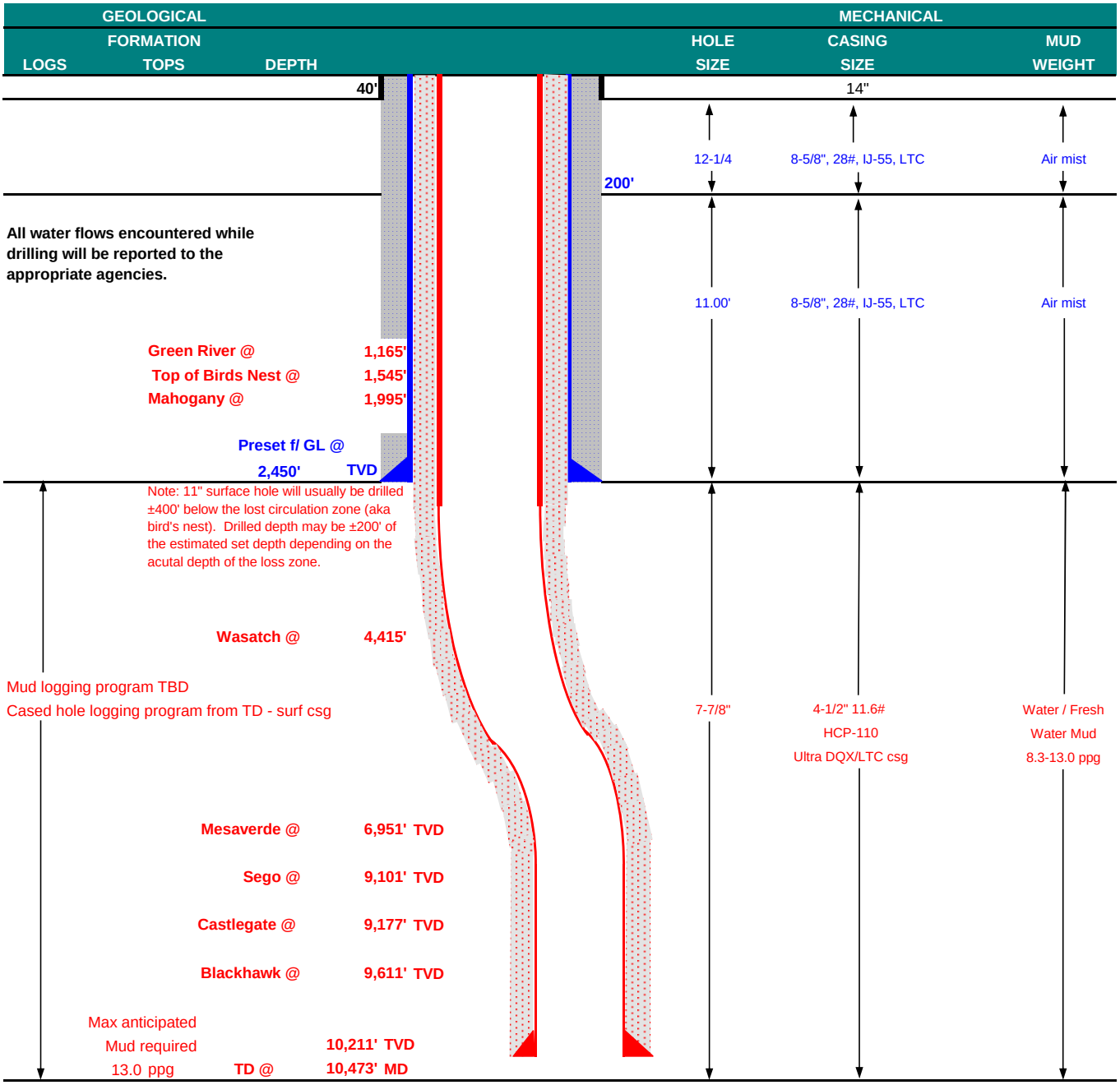
RECEIVED: Mar. 13, 2012

KerrMcGee

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	February 8, 2012		
WELL NAME	**NBU 1022-8C1AS**			TD	10,211'	TVD	10,473' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	5,185'
SURFACE LOCATION	NWNE	943 FNL	1725 FEL	Sec 8	T 10S	R 22E	
	Latitude:	39.968145	Longitude:	-109.460393		NAD 83	
BTM HOLE LOCATION	NENW	102 FNL	2415 FWL	Sec 8	T 10S	R 22E	
	Latitude:	39.970450	Longitude:	-109.464473		NAD 83	
OBJECTIVE ZONE(S)	BLACKHAWK (Part of the Mesaverde Group)						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.						



NBU 1022-8C1AS

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION LTC	TENSION DQX
CONDUCTOR	14"	0-40'									
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,450	28.00	IJ-55	LTC	2.20	1.64	5.79	N/A
								10,690	8,650	279,000	367,174
PRODUCTION	4-1/2"	0	to	5,000	11.60	HCP-110	DQX	1.19	1.25		3.77
	4-1/2"	5,000	to	10,473'	11.60	HCP-110	LTC	1.19	1.25	5.48	

Surface Casing:

(Burst Assumptions: TD = 13.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.66 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT		YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1			+ 0.25 pps flocele					
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
			+ 2% CaCl + 0.25 pps flocele					
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**					
Option 2	LEAD	1,950'	65/35 Poz + 6% Gel + 10 pps gilsonite	180	35%	11.00		3.82
			+ 0.25 pps Flocele + 3% salt BWOW					
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
			+ 0.25 pps flocele					
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION	LEAD	3,913'	Premium Lite II +0.25 pps	310	35%	12.00		3.38
			celloflake + 5 pps gilsonite + 10% gel					
			+ 0.5% extender					
	TAIL	6,560'	50/50 Poz/G + 10% salt + 2% gel	1,550	35%	14.30		1.31
			+ 0.1% R-3					

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

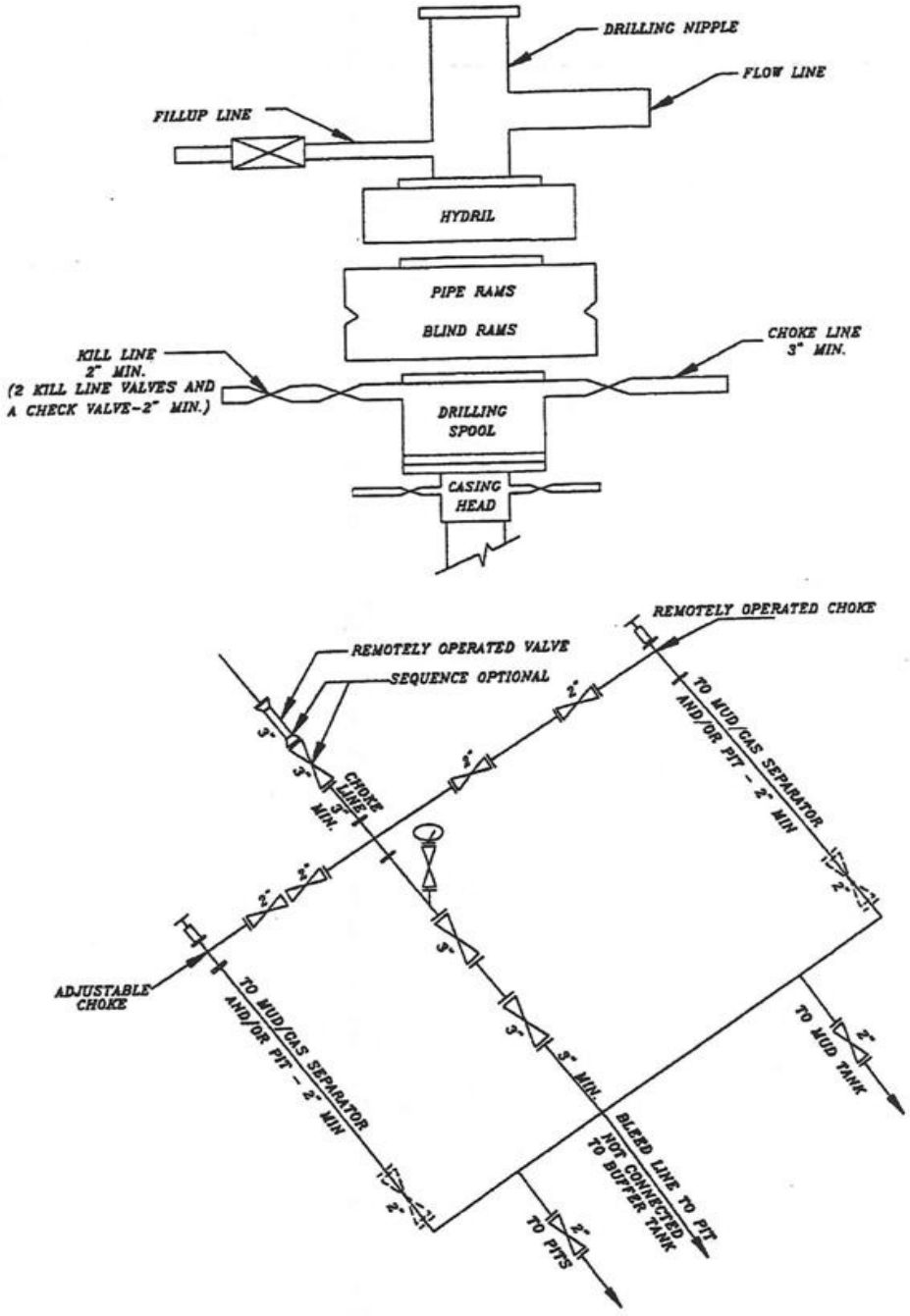
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: Nick Spence / Danny Showers / Chad Loesel **DATE:**

DRILLING SUPERINTENDENT: Kenny Gathings / Lovel Young **DATE:**

RECEIVED: Mar. 13, 2012

EXHIBIT A
NBU 1022-8C1AS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

RECEIVED: Mar. 13, 2012

Requested Drilling Options:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

RECEIVED: Mar. 13, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-8C1AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047506420000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0943 FNL 1725 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 08 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 2/9/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU AIR RIG ON FEBRUARY 9, 2012. DRILLED SURFACE HOLE TO 2,549'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
April 04, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE N/A		**DATE** 4/3/2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU 0466

SUNDRY NOTICES AND REPORTS ON WELLS

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
NBU 1022-8C1AS

2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER:
43047506420000

3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER:
720 929-6515

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0943 FNL 1725 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNE Section: 08 Township: 10.0S Range: 22.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 4/8/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU ROTARY RIG. FINISHED DRILLING FROM 2549'TO 10463' ON 4/6/2012. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED SST 54 RIG ON 4/8/2012 @ 12:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
April 13, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE		**DATE**
N/A		4/9/2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: NBU 1022-8C1AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047506420000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 **PHONE NUMBER:** 720 929-6527

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0943 FNL 1725 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 08 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 6/11/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON JUNE 11, 2012 AT 2:30 P.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
June 13, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jenn Hawkins	720 929-6247	Staff Operations Specialist III
SIGNATURE N/A		**DATE** 6/13/2012

RECEIVED: Jun. 13, 2012

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. UTU466

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. UTU63047A

2. Name of Operator KERR MCGEE OIL & GAS ONSHORE LP — Contact: CARA MAHLER — E-Mail: cara.mahler@anadarko.com

8. Lease Name and Well No. NBU 1022-8C1AS ✓

3. Address 1099 18TH STREET, SUITE 1800, DENVER, CO 80202

3a. Phone No. (include area code) Ph: 720-929-6029

9. API Well No. 43-047-50642

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface NWNE 943FNL 1725FEL 39.968145 N Lat, 109.460394 W Lon

At top prod interval reported below NENW 88FNL 2413FWL

At total depth NENW 153FNL ~~2441~~ 2459FWL BHL by HSM

10. Field and Pool, or Exploratory NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey or Area Sec 8 T10S R22E Mer SLB

12. County or Parish UINTAH — 13. State UT

14. Date Spudded 01/26/2012

15. Date T.D. Reached 04/06/2012

16. Date Completed ☐ D & A ☒ Ready to Prod. 06/11/2012

17. Elevations (DF, KB, RT, GL)* 5183 GL

18. Total Depth: MD 10463 TVD 10226

19. Plug Back T.D.: MD 10419 TVD 10182

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
SD/DSN/ACTR-CBL/GR/CCL/TEMP

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	2529		800		0	
7.875	4.500 P-110	11.6	0	10463		1961		100	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	8935							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	MESAVERDE	7212	10000	7212 TO 10000	0.360	210	OPEN
B)							
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
7212 TO 10000	PUMP 12,176 BBLS SLICK H2O & 273,564 LBS 30/50 OTTAWA SAND

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JUL 31 2012
DIV. OF OIL, GAS & MINING

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
06/11/2012	06/12/2012	24	→	0.0	2729.0	0.0			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
20/64	2289 SI	3061.0	→	0	2729	0		PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #144101 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				GREEN RIVER	1165
				BIRD'S NEST	1545
				MAHOGANY	1995
				WASATCH	4641
				MESAVERDE	7178

32. Additional remarks (include plugging procedure):
The first 164? of the surface hole was drilled with a 12 ?? bit. The remainder of surface hole was drilled with an 11? bit. DQX csg was run from surface to 5020'; LTC csg was run from 5020? to 10,463?. Attached is the chronological well history, perforation report & final survey.

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #144101 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal

Name *(please print)* CARA MAHLER Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 07/27/2012

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-8C1AS BLUE		Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD	Rig Name No: SST 54/54, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/15/2011	End Date: 4/8/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/7/2012	8:00 - 11:00	3.00	MIRU	01	C			SKD RIG TO WELL 2/4 ON PAD NBU 1022-8C1AS /// DERRICK UP @ 09:30 /// RELEASE TRUCKS @ 09:30
	11:00 - 13:00	2.00	PRPSPD	14	A	P		WELD ON CONDUCTOR & RIG UP FLOWLINE
	13:00 - 13:30	0.50	PRPSPD	06	A	P		PU 12.25" 8" MM & 12.25" BIT
	13:30 - 14:30	1.00	DRLSUR	02	B	P		SPUD 12.25" SURFACE HOLE F/ 40'- 165'
	14:30 - 15:00	0.50	DRLSUR	06	A	P		TOOH & LD 12.25" BIT
	15:00 - 16:00	1.00	DRLSUR	06	A	P		PU 11" BIT & DIR TOOLS & SCRIBE /// TIH
	16:00 - 0:00	8.00	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 164'- 1253' /// ROP= 1089' @ 136 FPH /// WOB= 22-26K /// RPM= 55/117 /// GPM= 650 /// SPP= 1400/1000 /// NO LOSSES
2/8/2012	0:00 - 10:00	10.00	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 1253'- 2266' /// ROP= 1013' @ 101 FPH /// WOB= 22-26K /// RPM= 55/117 /// GPM= 650 /// SPP= 1400/1000 /// LOST 75% RETURNS @ 1480' /// AIR ON @ 800 CFM /// GAS KICK @ 2130' /// AIR OFF /// GAS BRINGING WATER FLOW
	10:00 - 10:30	0.50	DRLSUR	08	B	Z		WORK ON RESERVE PIT PUMP /// LOST PRIME
	10:30 - 13:00	2.50	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 2266'-2540 /// ROP= 274' @ 109 FPH /// WOB= 22-26K /// RPM= 55/117 /// GPM= 650 /// SPP= 1400/1000 /// GAS KICKING & WATER FLOW
	13:00 - 14:00	1.00	DRLSUR	05	A	P		CIRC & COND HOLE /// WAIT ON KILL 11.2+ KILL MUD F/ PRODUCTION RIG
	14:00 - 14:30	0.50	DRLSUR	05	B	P		PUMP 240 BBL" 11.2 KILL MUD
	14:30 - 16:00	1.50	DRLSUR	05	J	P		WATCH FOR FLOW /// WAIT ON MORE KILL WT MUD TO FILL HOLE W/ WHILE TRIPING /// PULL 5 JT'S
	16:00 - 19:30	3.50	DRLSUR	06	A	P		TOOH & LD DIR TOOLS
	19:30 - 21:00	1.50	CSG	12	C	P		PJSM /// RUN 57 JT'S, 8-5/8", 28#, J-55, LT&C, CSG /// SHOE SET @ 2520' /// BAFFLE @ 2474'
	21:00 - 22:30	1.50	CSG	05	A	P		CIRC 8-5/8" CSG @ 2525' /// PJSM & SPOT IN PRO-PETRO CMT TRUCKS
	22:30 - 23:00	0.50	CSG	12	E	P		TEST LINES TO 1000 PSI /// PUMP 20 BBL'S WATER SPACER /// PUMP 20 BBL GEL WATER PRE FLUSH /// PUMP 300 sx (61.4 BBL'S) CLASS G CMT @ 15.8 WT & 1.15 YIELD /// DROP PLUG & DISPLACE W/ 129 BBL'S WATER /// PLUG DN @ 23:07 2/8/2012 /// BUMP PLUG @ 650 PSI /// FINAL= 200 PSI /// CHECK FLOATS- HELD W/ .5 BBL'S BACK /// NO RETURNS & NO CMT TO SURFACE
	23:00 - 23:30	0.50	CSG	12	E	P		PUMP FIRST TOP OUT W/ 150sx (30.7 BBL'S) NO CMT TO SURFACE
	23:30 - 0:00	0.50	CSG	14	A	P		CUT OFF CONDUCTOR & HANG OFF 8-5/8" CSG
2/9/2012	0:00 - 2:00	2.00	CSG	13	A	P		WOC
	2:00 - 3:30	1.50	CSG	12	E	P		PUMP 2nd & 3rd TOP OUTS W/ 1HR WAIT BETWEEN JOBS /// 350 sx TOTAL CMT PUMPED /// NO CMT TO SURFACE /// WILL TOP OUT AGAIN ON NEXT JOB
	3:30 - 4:00	0.50	RDMO	01	E	P		RIG DN /// RELEASE RIG @ 04:00 2/9/2012 TO THE NBU 1022-BB1DS

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-8C1AS BLUE			Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD		Rig Name No: SST 54/54, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/15/2011		End Date: 4/8/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/30/2012	19:00 - 21:00	2.00	DRLPRO	01	C	P		SKID RIG & CENTER OVER HOLE
	21:00 - 23:00	2.00	DRLPRO	14	A	P		NIPPLE UP BOP,FLOW LINE & MI SWACO
	23:00 - 0:00	1.00	DRLPRO	15	A	P		TESTING BOP
3/31/2012	0:00 - 6:00	6.00	DRLPRO	15	A	P		TEST BOP
	6:00 - 7:00	1.00	DRLPRO	15	A	P		TEST MI SWACO DRILL CHOKE LINES
	7:00 - 8:00	1.00	DRLPRO	06	A	P		PU/MU BIT& BHA
	8:00 - 14:30	6.50	DRLPRO	06	A	P		TRIP IN AND INSPECT HEVI-WATE DRILL PIPE CHANGE OUT 5 JTS.HARD BANDING GONE, TAG CEMENT@ 2,419
	14:30 - 15:30	1.00	DRLPRO	09	A	P		CUT DRILLING LINE 90'
	15:30 - 16:30	1.00	DRLPRO	07	C	P		CHANGE OUT SAVER SUB
	16:30 - 18:30	2.00	DRLPRO	02	F	P		DRILL CEMENT & SHOE TRACK F/ 2,419 TO 2,549,SHOE@ 2520
	18:30 - 0:00	5.50	DRLPRO	02	C	P		DRILL,ROT,SLIDE,SURVEY, F/2,549 TO 3,000 AROP,82 WOB 20/22K TDRPM 42/45, MMRPM 83,TOTAL RPM 128, DIFF. 350 GPM.505 PSI ON/OFF 1,280/ 975,TORQUE ON/OFF 6,000/4,525,ROT.62.7%,SLIDE 37.3% (10' W & 5' E OF CENTER, HOLE SEEPING 3 +/- BBL/HR ANN.PRESSURE 35 FULL OPEN, BG GAS 25,CONN. GAS 40 FLARE 0 START DRLG,3/31/12@ 18:30
4/1/2012	0:00 - 9:00	9.00	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/3,000 TO 3,771 AROP,85.6 WOB 20/22K TDRPM 42/45, MMRPM 83,TOTAL RPM 128, DIFF. 340 GPM.505 PSI ON/OFF 1,325/1125,TORQUE ON/OFF 8,425/6,825,ROT.76%,SLIDE 24% (10' W & 5' E OF CENTER, 3 ft. RIGHT & 3 ft.HIGH, HOLE SEEPING 2 +/ - BBL/HR ANN.PRESSURE 35 FULL OPEN, BG GAS 25,CONN. GAS 40 FLARE 0 ROTATING BEARING ASSY. LOCKED UP
	9:00 - 11:00	2.00	DRLPRO	06	H	X		TRIP OUT HOLE FOR BEARING ASSY. NEW BEARING ASSY. ON LOCATION@ 11:00
	11:00 - 14:00	3.00	DRLPRO	14	A	X		NIPPLE DOWN ROT.HEAD AND ATTEMPT TO GHANGE OUT NEW ROTATING ASSY. NOT THE SAME. FLANGE IS NOT DRILLED FOR 11" 5,000,
	14:00 - 19:00	5.00	DRLPRO	22	L	X		W/O/ SMITH ROTATING HEAD ASSY.
	19:00 - 0:00	5.00	DRLPRO	22	L	X		CHANGE OUT SMITH ROT.HEAD ASSY . FROM 11"X 5,000 TO 11"X 3,000 CUT AND FAB FLOW LINE NIPPLE UP SAME.
4/2/2012	0:00 - 0:30	0.50	DRLPRO	14	A	P		NIPPLE UP ROT. HEAD
	0:30 - 3:00	2.50	DRLPRO	15	A	P		SAFETY MEETING RIG UP B&C QUICK TEST AND TEST ROTATING HEAD & LINES 1,500
	3:00 - 4:00	1.00	DRLPRO	06	A	P		INSTALL WEAR BUSHING
	4:00 - 6:00	2.00	DRLPRO	06	A	P		PU MU DIRECTIONAL TOOLS & TRIP IN HOLE TO 3,771 NO FILL

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-8C1AS BLUE		Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD	Rig Name No: SST 54/54, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/15/2011	End Date: 4/8/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	6:00 - 15:00	9.00	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/3,771 TO 4,335 AROP,62.6 WOB 20/22K TDRPM 45/50, MMRPM 83,TOTAL RPM 130, DIFF. 285 GPM.501 PSI ON/OFF 1,525/1,245,TORQUE ON/OFF 12,425/9,825,ROT.64%,SLIDE 37% (10' W & 5' E OF CENTER, 3 ft. RIGHT & 3 ft.LOW, HOLE SEEPING 3 +/ - BBL/HR ANN.PRESSURE 135 FULL OPEN, BG GAS 30,CONN. GAS 140 FLARE 10 AT CONN.
	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SERVICE,FUCTION BOP&C-O-M
	15:30 - 0:00	8.50	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/4,335 TO 5,000 AROP,78.2 WOB 20/22K TDRPM 48, MMRPM 82,TOTAL RPM 128, DIFF. 295/320 GPM.502 PSI ON/OFF 1,845/1,550,TORQUE ON/OFF 12,025/9,550,ROT.66%,SLIDE 33% (10' W & 5' E OF CENTER, 3 ft. RIGHT & 20 ft.LOW, HOLE SEEPING 3 +/- BBL/HR ANN.PRESSURE 135 FULL OPEN, BG GAS 30/70,CONN. GAS 105 FLARE 3/ 10 MI SWACO ON LINE @ 21:00 HRS.,ANN.130 TO 155 PSI.
4/3/2012	0:00 - 14:00	14.00	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/5,000 TO 6,431 AROP,102 WOB 20/22K TDRPM 48, MMRPM 82,TOTAL RPM 128, DIFF. 320 GPM.505 PSI ON/OFF 2,145/1,855,TORQUE ON/OFF 12,025/9,550,HOLE SEEPING 18 +/- BBL/HR PUMP LCM&GEL SWEEP ANN.PRESSURE 165 FULL OPEN, BG GAS 165,CONN.GAS 295 FLARE 3/5 MI SWACO ON LINE
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SERVICE,FUNCTION BOP & C-O-M
	14:30 - 21:00	6.50	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/6,431 TO 7,097 AROP,102 WOB 24/26K TDRPM 70, MMRPM 88,TOTAL RPM 158, DIFF. 195 GPM.555 PSI ON/OFF 2,698/2,125,TORQUE ON/OFF 17,585/ 12,550,ROT.98%,SLIDE 2% (10' W & 5' E OF CENTER, 3 ft. RIGHT & 20 ft.LOW, HOLE SEEPING 2 +/- BBL/HR DUST 1 SK. LCM PER HR. CIDER FIBER. ANN.PRESSURE 165 FULL OPEN, BG GAS 165,CONN.GAS 295 FLARE 0 MI SWACO ON LINE
	21:00 - 21:30	0.50	DRLPRO	07	C	P		SERVICE TD INSTALL PROXIMETY SWITCH
	21:30 - 0:00	2.50	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/ 7,097 TO 7,221 AROP,49.6 WOB 24/26K TDRPM 65, MMRPM 88,TOTAL RPM 158, DIFF. 195 GPM.555 PSI ON/OFF 2,698/2,125,TORQUE ON/OFF 14,355/ 12,245,ROT.95%,SLIDE 4% HOLE SEEPING 2/3 +/- BBL/HR DUST 1 SK. LCM PER HR. ANN.PRESSURE 165 FULL OPEN, BG GAS 165,CONN.GAS 295 FLARE 0 MI SWACO ON LINE

Operation Summary Report

Well: NBU 1022-8C1AS BLUE		Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD	Rig Name No: SST 54/54, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/15/2011	End Date: 4/8/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/4/2012	0:00 - 14:30	14.50	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/ 7,221 TO 8,529,AROP,90.2 WOB 24/26K TDRPM 65, MMRPM 88,TOTAL RPM 158, DIFF. 265 GPM.555 PSI ON/OFF 3,035/2,725,TORQUE ON/OFF 19,655/ 14,660,ROT.97%,SLIDE 3% HOLE SEEPING 12 +/- BBL/HR DUST 3 SK. LCM PER HR. ANN.PRESSURE 165/210 FULL OPEN, BG GAS 314,CONN.GAS 1004 FLARE 5 MI SWACO ON LINE
	14:30 - 15:00	0.50	DRLPRO	07	A	P		RIG SERVICE,FUNCTION BOP&C-O-M
	15:00 - 20:30	5.50	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/ 8,529 TO 9,005,AROP,86.5 WOB 22/24K TDRPM 65, MMRPM 88,TOTAL RPM 158, DIFF. 325 GPM.540 PSI ON/OFF 3,000/2,750,TORQUE ON/OFF 21,113/ 19,660,ROT.100%,SLIDE 0% HOLE SEEPING 3 +/- BBL/HR DUST 3 SK. LCM PER HR. ANN.PRESSURE 195/204 CHOKE FULL OPEN, BG GAS 1545,CONN.GAS 2450 FLARE 8/10 MI SWACO ON LINE TIGHT AFTER CONN. WORK PIPE TO START ROTATING HIGH TORQUE HOLDING 450 BACK PRESSURE DROPING TORQUE TO 19,600 TO 20,450
	20:30 - 21:00	0.50	DRLPRO	03	A	P		PUMP 30Bbl 11# WEIGHTED SWEEP AND WORK PIPE TIGHT HOLE.
	21:00 - 0:00	3.00	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/ 9,005 TO 9,326,AROP,107 WOB 20/22K TDRPM 65, MMRPM 88,TOTAL RPM 158, DIFF. 325 GPM.540 PSI ON/OFF 3,000/2,750,TORQUE ON/OFF 19,995/ 18,455,ROT.100%,SLIDE 0% HOLE SEEPING 3/4 +/- BBL/HR DUST 1 SK. LCM PER HR. ANN.PRESSURE 450/475 WITH CHOKE, TORQUE 21,300 TO 22,500 BG GAS 1145,CONN.GAS 1875 FLARE 8/10 MI SWACO ON LINE
4/5/2012	0:00 - 2:00	2.00	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/ 9,326 TO 9,401,AROP,37.5 WOB 20/22K TDRPM 65, MMRPM 82,TOTAL RPM 147, DIFF. 235 GPM.505 PSI ON/OFF 3,075/2,850,TORQUE ON/OFF 21,875/ 21,875,ROT.100%,SLIDE 0% DUST 2 SK. LCM PER HR. ANN.PRESSURE 450/475 WITH CHOKE,HOLDING 600 ON CONN.OIL ON PITS, BG GAS 1825,CONN.GAS 2105 FLARE 8/10 MI SWACO ON LINE
	2:00 - 3:00	1.00	DRLPRO	05	F	P		COND.MUD HOLE STICKY TQ.23,000 MUD WT. 8. EXTRELY FOMY BUILD MUD WT. TO 9.5, DRILLING DIFFICULT DUE TO HI TQ.

Operation Summary Report

Well: NBU 1022-8C1AS BLUE		Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD	Rig Name No: SST 54/54, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/15/2011	End Date: 4/8/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	3:00 - 12:30	9.50	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/ 9,401 TO 9,898,AROP,52.3 WOB 20/22K TDRPM 70, MMRPM 82,TOTAL RPM 147, DIFF. 155/275 GPM.505 PSI ON/OFF 3,075/2,850,TORQUE ON/OFF 21,875/ 21,875,ROT.100%,SLIDE 0% DUST 2 SK. LCM PER HR. ANN.PRESSURE 450/475 WITH CHOKE,HOLDING 600 ON CONN.OIL ON PITS, BG GAS 375,CONN.GAS 1925 FLARE 8/10 MI SWACO ON LINE
	12:30 - 14:30	2.00	DRLPRO	05	F	P		CIRC.COND. MUD HI TQ. PUMP SWEEP TO CLEAN HOLE BUILD MUD WT. F/9.7 TO 10.1
	14:30 - 16:30	2.00	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/ 9,898 TO 10,053,AROP,77.5 WOB 20K TDRPM 70, MMRPM 82,TOTAL RPM 147, DIFF. 255 GPM.505 PSI ON/OFF 3,095 / 2,925,TORQUE ON/OFF 22,075 22,000,ROT.100%,SLIDE 0% DUST 2 SK. LCM PER HR. ANN.PRESSURE 450/475 WITH CHOKE,HOLDING 600 ON CONN.OIL ON PITS, BG GAS 225,CONN.GAS 985 FLARE 5/8 MI SWACO ON LINE
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE,FUNCTION BOP & C-0-M
	17:00 - 18:00	1.00	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/ 10,053 TO 10,148,AROP,95 WOB 20K TDRPM 70, MMRPM 82,TOTAL RPM 147, DIFF. 255 GPM.505 PSI ON/OFF 3,095 / 2,925,TORQUE ON/OFF 22,075 22,000, BNUILD MUD WT. TO 11.6 DUST 2 SK. LCM PER HR. ANN.PRESSURE 300, WITH CHOKE,HOLDING 600 ON CONN.OIL ON PITS, BG GAS 225,CONN.GAS 985 FLARE 5/8 MI SWACO ON LINE
	18:00 - 19:00	1.00	DRLPRO	05	F	P		CIRC.COND. MUD HI TQ. PUMP SWEEP TO CLEAN HOLE BUILD MUD WT. F/10.1 TO 11.6 HI TQ.
	19:00 - 0:00	5.00	DRLPRO	02	D	P		DRILL,ROT,SLIDE,SURVEY, F/ 10,148 TO 10,290,AROP,28.4 WOB 20K TDRPM 70, MMRPM 82,TOTAL RPM 147, DIFF. 255 GPM.505 PSI ON/OFF 3,095 / 2,925,TORQUE ON/OFF 22,075 22,000, BNUILD MUD WT. TO 11.6 DUST 2 SK. LCM PER HR. ANN.PRESSURE 150, WITH CHOKE,HOLDING 300 ON CONN.OIL ON PITS, BG GAS 145,CONN.GAS 2103 FLAR 0 MI SWACO ON LINE
4/6/2012	-		CSGPRO					RUN PRODUCTION CASING - CASING SIZE 4.500 in, MD TOP: 18.0 usft MD LANDED: 10,462.7 usft
	0:00 - 5:30	5.50	DRLPRO	02	D	P		DRILL,ROT,SURVEY, F/ 10,290 TO 10,463,AROP,31.4 WOB 20K TDRPM 55/60, MMRPM 82,TOTAL RPM 142, DIFF 185 GPM.502 PSI ON/OFF 3,000 / 2,900,TORQUE ON/OFF 22,075 22,076, BUILD MUD WT. TO 11.6 ANN.PRESSURE 150, WITH CHOKE FULL OPEN OIL ON PITS, BG GAS 145,CONN.GAS 340 FLAR 0 MI SWACO ON LINE TD 10,463@ 05:30 4/6/12
	5:30 - 7:30	2.00	DRLPRO	05	A	P		CIRC.COND.MUD TO 11.8

Operation Summary Report

Well: NBU 1022-8C1AS BLUE		Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD	Rig Name No: SST 54/54, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/15/2011	End Date: 4/8/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 9:30	2.00	DRLPRO	06	E	P		TOOH ROTATING F/ 10,463 TO 9,000 TIGHT HOLE OVER PULL 325K
	9:30 - 15:00	5.50	DRLPRO	06	E	P		FINISH TOOH NO DRAG
	15:00 - 16:00	1.00	DRLPRO	06	E	P		L/D MOTOR & RACK BACK BHA
	16:00 - 21:30	5.50	DRLPRO	06	E	P		TIH NO FILL WASH LAST 5 STDS. DOWN TO BOTTOM AT 10,463
	21:30 - 23:00	1.50	DRLPRO	05	A	P		CIRC. COND.MUD F/ LOGS
	23:00 - 0:00	1.00	DRLPRO	06	E	P		TOOH F/ LOGS
4/7/2012	0:00 - 3:30	3.50	DRLPRO	06	E	P		TOOH TO 2064
	3:30 - 5:00	1.50	DRLPRO	09	A	P		CUT DRILLING LINE, 135 FT.
	5:00 - 7:00	2.00	DRLPRO	06	E	P		FINISH TOOH REMOVE BIT AND BIT SUB
	7:00 - 7:30	0.50	DRLPRO	11	D	P		SAFETY MEETING & RIG UP HALLIBURTON WIRE LINE F/ LOGS
	7:30 - 11:00	3.50	DRLPRO	11	D	P		RIH & LOG W/ TRIPLE COMBO TAG BOTTOM @ 10,454 LOGGERS TD, DRILLERS DEPTH, 10,463
	11:00 - 12:00	1.00	DRLPRO	11	D	P		RIG DOWN HALLIBURTON WIRE LINE
	12:00 - 14:30	2.50	DRLPRO	22	O	P		COMPLICATIONS WITH SMITH ROTATING ASS. VERY TIGHT FIT REMOVE AND PULL WEAR BUSHING.
	14:30 - 16:00	1.50	DRLPRO	12	A	P		SAFETY MEETING & RIG UP TO RUN CASING WITH FRANK'S WESTATES
	16:00 - 0:00	8.00	DRLPRO	12	A	P		RUN CASING RAN 128 JTS OF 4.5", 11.6#, P-110, LT&C CASING & 95 JTS OF 4.5", 11.6#, P-110, DQX CASING @ 8,129'
4/8/2012	0:00 - 2:00	2.00	CSGPRO	12	C	P		RUN CASING TAG@ 10,463,CASING RAN AS FOLLOWS RAN 128 JTS OF 4.5", 11.6#, P-110, LT&C CASING & 118 JTS OF 4.5", 11.6#, P-110, DQX CASING TOTAL JTS. 246, WITH WEATHERFORD FLOAT SHOE & FLOAT COLLAR, 20 CENTRALIZERS SPACED @ 15' ABOVE SHOE, TOP OF SECOUND COLLARS, & EVERY 3RD COLLAR TO 8,160' 2 MARKER JOINTS AT 9,853' & 7,174' + X-OVER AT 5,005, LAND CASING @ 10,662' PU 155K. SO 115K. STRING WT 130K
	2:00 - 3:00	1.00	CSGPRO	05	A	P		CIRC.BOTTOMS UP GAS COND. HOLE F/CEMENT
	3:00 - 4:00	1.00	CSGPRO	12	B	P		RIG UP BJ BAKER-HUGHES & SAFETY MEETING
	4:00 - 7:00	3.00	CSGPRO	12	E	P		CEMENT 4 1/2 CASING AS FOLLOWS PUMP 5 BBLS OF FRESH WATER SPACER FOLLOW WITH 40 BbLS SEAL BOND SPACER MIX AND PUMP LEAD CEMENT 440 SKS.@12 PPB YLD 2.26 MIX WATER GPS 12.41, 176 Bbls. MIX AND PUMP TAIL CEMENT 1,521 SKS @14.3 PPB. YLD 1.31 MIX WATER GPS 5.91 355 Bbls,SHUT DOWN. WASH LINES. DROP PLUG DISPLACE @ 7 BPM W/ 161 Bbls.FRESH WATER + CLAYCARE + 1 GAL. MAGNACIDE. LOST RETURNS LAST 20 Bbls OF DISPLACEMENT, BUMP PLUG 500 OVER LIFT PRESSURE 3200 PSI HOLD 5 MINS.BLEAD BACK FLOATS HELD 1,75 Bbls. BACK, RIG DOWN B J SERVICE. NO CEMENT TO SURFICE.CALCULATED CEMENT TOPS LEAD 1600, TAIL 3920 ADD.PL2+6%Gel+5#KOL+0.4%SMS+0.25#CF+0.3% R-3 50:50:2+10%NaCL+0.2%R-3+0.05#SF+0.002FP-6L

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-8C1AS BLUE			Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD		Rig Name No: SST 54/54, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/15/2011		End Date: 4/8/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	4:00 - 6:52	2.87	CSGPRO					Primary CEMENT JOB PRODUCTION CASING- 4.500 in
	7:00 - 8:00	1.00	CSGPRO	12	B	P		RIG DOWN BJ CEMENT LINES & HEAD LOAD OUT SAME
	8:00 - 12:00	4.00	CSGPRO	14	A	P		NIPPLE DOWN BOP SET CASING SLIPS WITH 115K, CUT 4.5 CASING & CLEAN MUD TANKS, RELEASE RIG 4/8/12@ 12:00 NOON

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 1022-8C1AS BLUE	**Wellbore No.**	OH
Well Name	NBU 1022-8C1AS	**Wellbore Name**	NBU 1022-8C1AS
Report No.	1	**Report Date**	5/11/2012
Project	UTAH-UINTAH	**Site**	NBU 1022-8B PAD
Rig Name/No.		**Event**	COMPLETION
Start Date	5/11/2012	**End Date**	6/11/2012
Spud Date	2/7/2012	**Active Datum**	RKB @5,201.01ft (above Mean Sea Level)
UWI	NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0		

1.3 General

Contractor		**Job Method**		**Supervisor**	
Perforated Assembly		**Conveyed Method**			

1.4 Initial Conditions

Fluid Type		**Fluid Density**	
Surface Press		**Estimate Res Press**	
TVD Fluid Top		**Fluid Head**	
Hydrostatic Press		**Press Difference**	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	7,212.0 (ft)-10,000.0 (ft)	**Start Date/Time**	5/14/2012 12:00AM
No. of Intervals	36	**End Date/Time**	5/14/2012 12:00AM
Total Shots	210	**Net Perforation Interval**	62.00 (ft)
Avg Shot Density	3.39 (shot/ft)	**Final Surface Pressure**	
		Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/ Reservoir	CCL@ (ft)	CCL-TS (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
5/14/2012 12:00AM	MESAVERDE/			7,212.0	7,213.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-TS (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
5/14/2012 12:00AM	MESAVERDE/			7,274.0	7,276.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,354.0	7,357.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,464.0	7,468.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,504.0	7,508.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,557.0	7,558.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,588.0	7,590.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,646.0	7,649.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,694.0	7,695.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,766.0	7,768.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,790.0	7,792.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,809.0	7,811.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,931.0	7,932.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,950.0	7,952.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			7,985.0	7,986.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,022.0	8,024.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,412.0	8,413.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,506.0	8,507.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,528.0	8,530.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,583.0	8,585.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,606.0	8,608.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,698.0	8,699.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-TS (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
5/14/2012 12:00AM	MESAVERDE/			8,724.0	8,725.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,794.0	8,795.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,833.0	8,834.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,855.0	8,856.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,887.0	8,889.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			8,988.0	8,989.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			9,000.0	9,001.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			9,014.0	9,015.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			9,036.0	9,037.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			9,066.0	9,067.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			9,138.0	9,140.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			9,190.0	9,191.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			9,971.0	9,973.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	
5/14/2012 12:00AM	MESAVERDE/			9,996.0	10,000.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	

3 Plots

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-8C1AS BLUE		Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD	Rig Name No: GWS 1/1, GWS 1/1
Event: COMPLETION	Start Date: 5/11/2012	End Date: 6/11/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/7/2012	-							
5/11/2012	10:00 - 11:30	1.50	COMP	33		P		RU HOT OILER, NO PSI ON CSG FILLED SURFACE 1BBL, PRESSURED TO 1200 PSI PRIMARY PACKING ON 4 1/2" LEAKING, BLED DOWN TO 500 PSI AND HELD, MOVE TO NEXT WELL
5/23/2012	9:00 - 10:30	1.50	COMP	33		P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 0 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 25 PSI. 1ST PSI TEST T/ 9000 PSI. HELD FOR 30 MIN LOST 44 PSI. HAD SLIGHT MIGRATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL. SWIFW
5/24/2012	7:00 - 12:00	5.00	COMP	37		P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER PERF DESIGN. POOH. SWIFW
5/25/2012	-							
5/29/2012	12:30 - 18:00	5.50	COMP	36	B	P		FRAC STG 1)WHP 450 PSI, BRK 3357 PSI @ 4.7 BPM. ISIP 2750 PSI, FG .71. CALC HOLES OPEN @ 52.3 BPM @ 5584 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 3525 PSI, FG .79, NPI 775 PSI. MP 7327 PSI, MR 52.3 BPM, AP 5833 PSI, AR 51.4 BPM PUMPED 30/50 SAND IN THIS STAGE X-OVER FOR W L PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 9221' P/U PERF AS PER DESIGN. POOH. SWIFN.

Operation Summary Report

Well: NBU 1022-8C1AS BLUE		Spud Date: 2/7/2012	
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD		Rig Name No: GWS 1/1, GWS 1/1
Event: COMPLETION	Start Date: 5/11/2012		End Date: 6/11/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
5/30/2012	7:30 - 18:00	10.50	COMP	36	B	P		FRAC STG 2)WHP 1381 PSI, BRK 2135 PSI @ 4.4 BPM. ISIP 1851 PSI, FG .64. CALC HOLES OPEN @ 51.6 BPM @ 4406 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2270 PSI, FG .69, NPI 419 PSI. MP 4767 PSI, MR 52.8 BPM, AP 4198 PSI, AR 52.3 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8919' P/U PERF AS PER DESIGN. POOH. X-OVER FOR FRAC CREW. FRAC STG 3)WHP 1771 PSI, BRK 2520 PSI @ 4.7 BPM. ISIP 1969 PSI, FG .66. CALC HOLES OPEN @ 52.1 BPM @ 4690 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2517 PSI, FG .72, NPI 548 PSI. MP 5147 PSI, MR 52.9 BPM, AP 4563 PSI, AR 52.2 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8638' P/U PERF AS PER DESIGN. POOH. X-OVER FOR FRAC CREW. FRAC STG 4)WHP 1370 PSI, BRK 2444 PSI @ 4.1 BPM. ISIP 1468 PSI, FG .61. CALC HOLES OPEN @ 49.9 BPM @ 4358 PSI = 94% HOLES OPEN. (23/24 HOLES OPEN) ISIP 2625 PSI, FG .75, NPI 1167 PSI. MP 5081 PSI, MR 50.5 BPM, AP 4485 PSI, AR 50.1 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8054' P/U PERF AS PER DESIGN. X-OVER FOR FRAC CREW. FRAC STG 5)WHP 1067 PSI, BRK 2497 PSI @ 4.1 BPM. ISIP 1723 PSI, FG .65. CALC HOLES OPEN @ 50.3 BPM @ 4692 PSI = 91% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2784 PSI, FG .79, NPI 1061 PSI. MP 5075 PSI, MR 50.7 BPM, AP 4495 PSI, AR 50.4 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN,

Operation Summary Report

Well: NBU 1022-8C1AS BLUE		Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD	Rig Name No: GWS 1/1, GWS 1/1
Event: COMPLETION	Start Date: 5/11/2012	End Date: 6/11/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7841' P/U PERF AS PER DESIGN. POOH. X-OVER FOR FRAC CREW. FRAC STG 6)WHP 1285 PSI, BRK 2299 PSI @ 4.4 BPM. ISIP 1786 PSI, FG .67. CALC HOLES OPEN @ 50.3 BPM @ 4481 PSI = 100% HOLES OPEN. (21/21 HOLES OPEN) ISIP 2391 PSI, FG .75, NPI 605 PSI. MP 5094 PSI, MR 50.7 BPM, AP 4548 PSI, AR 50.4 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L PERF STG 7)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7679' P/U PERF AS PER DESIGN. SWIFN.
5/31/2012	8:00 - 18:00	10.00	COMP	36	B	P		FRAC STG 7)WHP 1276 PSI, BRK 2099 PSI @ 6.5 BPM. ISIP 1593 PSI, FG .65. CALC HOLES OPEN @ 49.7 BPM @ 4700 PSI = 84% HOLES OPEN. (20/24 HOLES OPEN) ISIP 2231 PSI, FG .73, NPI 638 PSI. MP 5701 PSI, MR 50.2 BPM, AP 5189 PSI, AR 49.9 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L PERF STG 8)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7538' P/U PERF AS PER DESIGN. POOH. X-OVER FOR FRAC CREW. FRAC STG 8)WHP 1485 PSI, BRK 2675 PSI @ 4.7 BPM. ISIP 1843 PSI, FG .68. CALC HOLES OPEN @ 42.6 BPM @ 3583 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2237 PSI, FG .74, NPI 394 PSI. MP 4365 PSI, MR 43.9 BPM, AP 3909 PSI, AR 43.1 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L PERF STG 9)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7387' P/U PERF AS PER DESIGN.

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-8C1AS BLUE			Spud Date: 2/7/2012
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD		Rig Name No: GWS 1/1, GWS 1/1
Event: COMPLETION	Start Date: 5/11/2012		End Date: 6/11/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/1/2012	9:00 - 18:00	9.00	COMP	36	B	P		FRAC STG 9)WHP 576 PSI, BRK 1427 PSI @ 2.8 BPM. ISIP 1144 PSI, FG .60. CALC HOLES OPEN @ 51.4 BPM @ 3788 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2244 PSI, FG .75, NPI 1100 PSI. MP 5738 PSI, MR 52.1 BPM, AP 3952 PSI, AR 51.2 BPM PUMPED 30/50 OTTAWA SAND IN THIS STAGE X-OVER FOR W L PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 7162'. POOH. TOTAL SAND = 273,564 LBS TOTAL CLFL = 12,176 BBLS
6/8/2012	7:00 - 7:30	0.50	COMP	48		P		HSM, P/U TBG, 0 PSI ON WELL
	7:30 - 14:00	6.50	COMP	31	I	P		P/U 3 7/8" SBB, POBS, RIH W/ 226 JTS 2 3/8" P-110 TBG, TAG KILL PLUG @7169', R/U PWR SWVL, BRK CIRC CONV, PSI TEST BOPS TO 3500#,
	14:00 - 17:00	3.00	COMP	44	C			(DRLG CBP #1) 7169 ', DRILL OUT HALIBURTON 8K CBP IN 10 MIN, 500 # DIFF, RIH TAG @ 7357 ', C/O 36 ' SAND, FCP = 0#, (DRLG CBP # 2) 7393 ', DRILL OUT HALIBURTON 8K CBP IN 5 MIN, 400# DIFF, RIH TAG @ 7508 ', C/O 30 ' SAND, FCP = 100 #, (DRLG CBP # 3) 7538 ', DRILL OUT HALIBURTON 8K CBP IN 8 MIN, 300 # DIFF, FCP = 100# CIRC CLEAN, POOH ABOVE PERFS W/ 14 JTS, EOT @ 7095' 5 PM SWI, SDFWE.
6/11/2012	7:00 - 7:15	0.25		48		P		HSM, SLIPS, TRIPS & FALLS, D/O PLUGS, PU TBG

Operation Summary Report

Well: NBU 1022-8C1AS BLUE	Spud Date: 2/7/2012	
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD	Rig Name No: GWS 1/1, GWS 1/1
Event: COMPLETION	Start Date: 5/11/2012	End Date: 6/11/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 17:00	9.75		44	C	P		SICP 1,250 PSI, OPEN WELL TO PIT, SURFACE CSG VALVE OPEN & LOCKED, OPEN RAMS & D/O REMAINING 6 PLUGS. C/O 15' SAND, TAG 4TH PLUG @ 7,679' DRL PLUG IN 10 MIN. 200 PSI INCREASE RIH, CSG PRESS 200 PSI. C/O 20' SAND, TAG 5TH PLUG @ 7,841' DRL PLUG IN 11 MIN. 300 PSI INCREASE RIH, CSG PRESS 200 PSI. C/O 20' SAND, TAG 6TH PLUG @ 8,054' DRL PLUG IN 10 MIN. 600 PSI INCREASE RIH, CSG PRESS 250 PSI. C/O 30' SAND, TAG 7TH PLUG @ 8,638' DRL PLUG IN 12 MIN. 500 PSI INCREASE RIH, CSG PRESS 400 PSI. C/O 15' SAND, TAG 8TH PLUG @ 8,919' DRL PLUG IN 10 MIN. 800 PSI INCREASE RIH, CSG PRESS 450 PSI. C/O 30' SAND, TAG 9TH PLUG @ 9,221' DRL PLUG IN 11 MIN. 900 PSI INCREASE RIH, CSG PRESS 800 PSI. ((WASHED OUT 2 TEES ON FLOWLINE HAD TO C/O)). PBTD @ 10,418', BTM PERF @ 10,000', RIH TO 10,145' NO TAG, 145' PAST BTM PERF W/ 319 JTS 2 3/8" P-110 TBG, LD 38 JTS, PU & STRIP IN TBG HANGER & LAND TBG W/ 281 JTS 2 3/8" P-110, EOT 8,935.26'. RD POWER SWIVEL, FLOOR & TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF BIT W/ 2,700 PSI, LET BIT FALL FOR 20 MIN. P/T FLOW LINE FROM WH TO HAL 9000 TO 4,000 PSI W/ RIG PUMP, NO VISIBLE LEAKS. TURN OVER TO FLOW BACK CREW. RD & MOVE TO NEXT WELL ON PAD, SDFN. KB= 18' 4 1/16" WEATHERFORD HANGER= .83' TBG DELIVERED 314 JTS 281 JTS 2 3/8" P-110 = 8,914.23' TBG USED 281 JTS POBS= 2.20' TBG RETURNED 33 JTS EOT @ 8,935.26' TWTR= 12,176 BBLS TWR= 3,000 BBLS TWLTR= 9,176 BBLS

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-8C1AS BLUE		Spud Date: 2/7/2012	
Project: UTAH-UINTAH	Site: NBU 1022-8B PAD		Rig Name No: GWS 1/1, GWS 1/1
Event: COMPLETION	Start Date: 5/11/2012		End Date: 6/11/2012
Active Datum: RKB @5,201.01ft (above Mean Sea Level)	UWI: NW/NE/0/10/S/22/E/8/0/0/26/PM/N/943/E/0/1725/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	14:30 - 10:00			50				WELL TURNED TO SALES @ 1430 HR ON 6/11/2012, 2800 MCFD, 1920 BWPD, 2600# FCP, 2400# FTP, 20/64" CK.
6/12/2012	7:00 -			50				WELL IP'D ON 6/12/12 - 2729 MCFD, 0 BOPD, 0 BWPD, CP 3061#, FTP 2289#, CK 20/64", LP 121#, 24 HRS

Project: UTAH - UTM (feet), NAD27, Zone 12N
Site: UINTAH_NBU 1022-8B PAD
Well: NBU 1022-8C1AS
Wellbore: NBU 1022-8C1AS
Section:
SHL:
Design: NBU 1022-8C1AS (wp01)
Latitude: 39.968180
Longitude: -109.459710
GL: 5185.30
KB: 18' RKB + GL @ 5203.30ft (SST 54)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1169.00	1177.02	GREEN RIVER
1549.00	1578.86	BIRDS NEST
1999.00	2070.68	MAHOGANY MARKER
4419.00	4657.83	WASATCH
5019.00	5267.73	TOP OF THE CYLINDER
6955.00	7203.87	MESAVERDE
9105.00	9353.89	SEGO
9181.00	9429.90	CASTLEGATE
9615.00	9863.90	BLACKHAWK

WELL DETAILS: NBU 1022-8C1AS

+N/-S	+E/-W	Northing	Ground Level: 5185.30 Easting	Latittude	Longitude	Slot
0.00	0.00	14518184.57	2071997.03	39.968180	-109.459710	

CASING DETAILS

TVD	MD	Name	Size
2422.17	2529.17	8-5/8"	8-5/8

T M

Azimuths to True North
Magnetic North: 10.96°

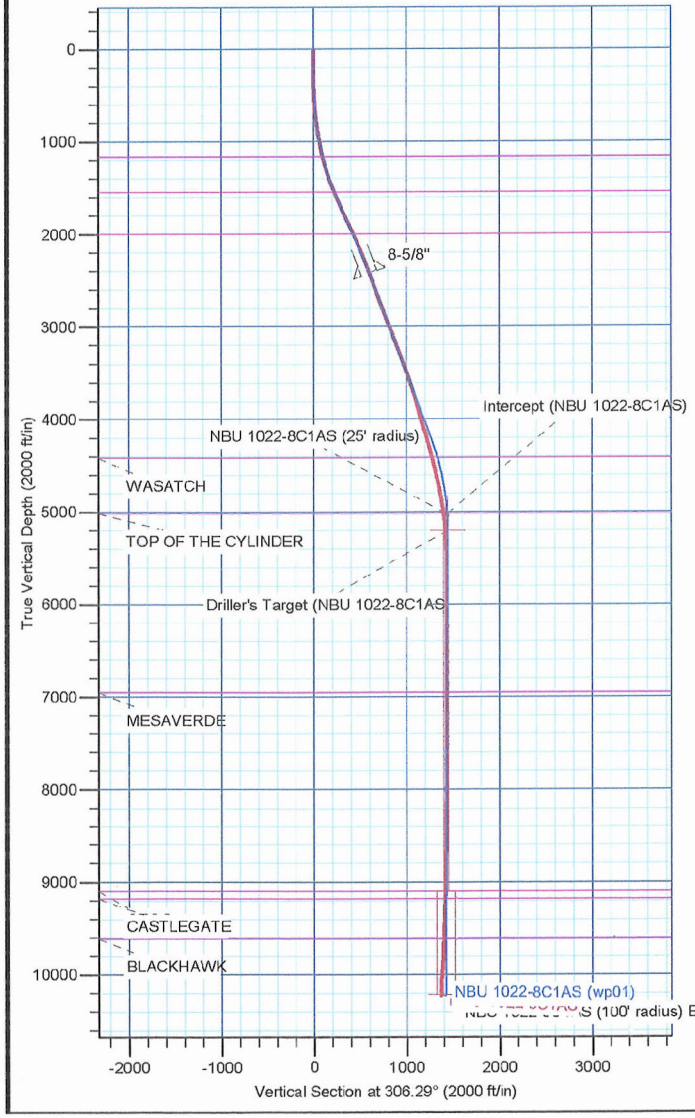
Magnetic Field
Strength: 52241.7snT
Dip Angle: 65.83°
Date: 3/12/2012
Model: IGRF2010

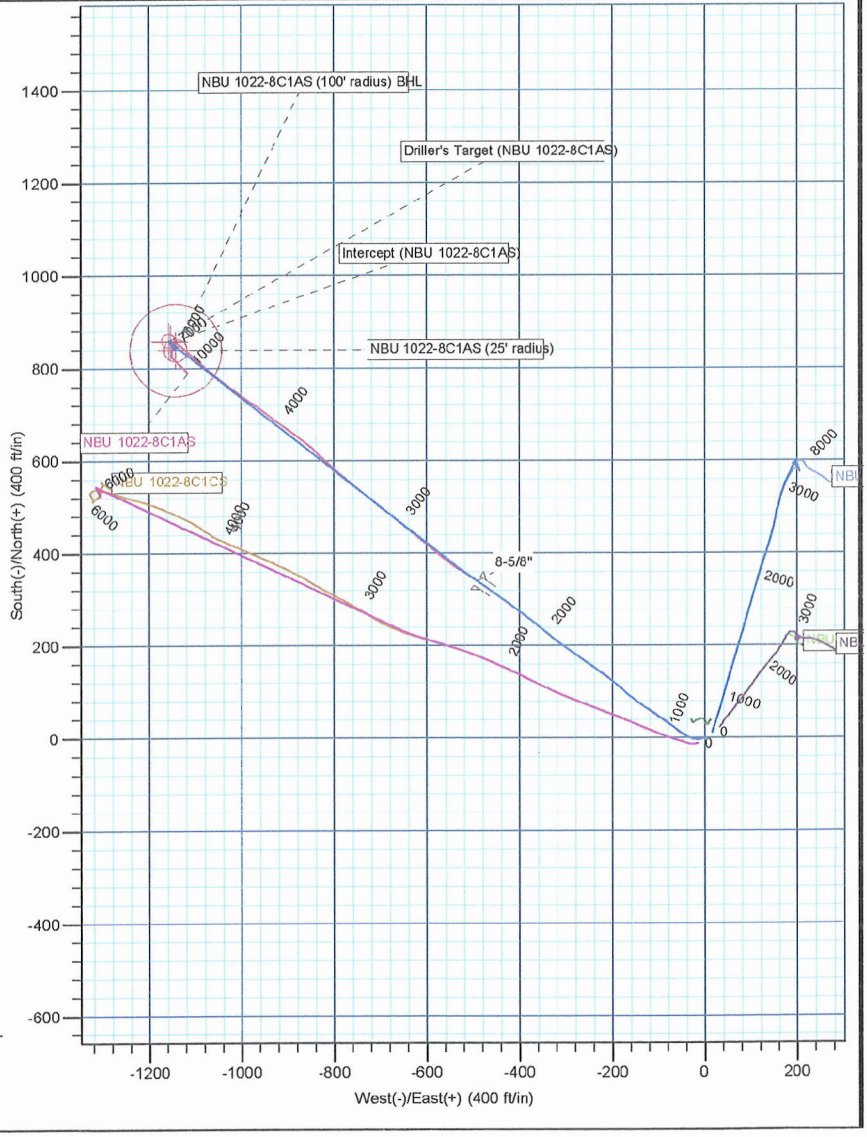
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Intercept (NBU 1022-8C1AS)	5019.00	856.00	-1153.59	14519020.52	2070828.83	39.970530	-109.463826	Point
NBU 1022-8C1AS (25' radius)	5019.00	839.53	-1143.09	14519004.23	2070839.61	39.970485	-109.463789	Circle (Radius: 25.00)
Driller's Target (NBU 1022-8C1AS)	5200.00	859.53	-1158.09	14519023.97	2070824.27	39.970540	-109.463843	Circle (Radius: 15.00)
NBU 1022-8C1AS (100' radius) BHL	10215.00	839.53	-1143.09	14519004.23	2070839.61	39.970485	-109.463789	Circle (Radius: 100.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
2489.00	20.75	304.53	2384.61	332.14	-479.51	0.00	0.00	583.08
2639.00	20.75	304.53	2524.88	362.26	-523.29	0.00	0.00	636.20
2703.58	20.49	308.12	2585.32	375.73	-541.61	2.00	103.18	658.93
4424.23	20.49	308.12	4197.09	747.61	-1015.48	0.00	0.00	1261.00
5448.85	0.00	0.00	5200.00	859.53	-1158.09	2.00	180.00	1442.19
5544.96	0.29	143.14	5296.11	859.34	-1157.94	0.30	143.14	1441.96
10463.91	0.29	143.14	10215.00	839.53	-1143.09	0.00	0.00	1418.27





Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Site:	UINTAH_NBU 1022-8B PAD	**MD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Well:	NBU 1022-8C1AS	**North Reference:**	True
Wellbore:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 1022-8C1AS	**Database:**	edmp

Project	UTAH - UTM (feet), NAD27, Zone 12N		
Map System:	Universal Transverse Mercator (US Survey Feet)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	UINTAH_NBU 1022-8B PAD				
Site Position:		**Northing:**	14,518,172.28 usft	**Latitude:**	39.968147
From:	Lat/Long	**Easting:**	2,071,981.26 usft	**Longitude:**	-109.459767
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.99 °

Well	NBU 1022-8C1AS					
Well Position	**+N/-S**	0.00 ft	**Northing:**	14,518,184.58 usft	**Latitude:**	39.968180
	+E/-W	0.00 ft	**Easting:**	2,071,997.02 usft	**Longitude:**	-109.459710
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,185.30 ft

Wellbore	NBU 1022-8C1AS				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	3/12/2012	10.96	65.83	52,242

Design	NBU 1022-8C1AS					
Audit Notes:						
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**		9.00
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**		
	9.00	0.00	0.00	306.29		

Survey Program **Date** 4/10/2012

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
245.00	2,489.00	Survey #1 (NBU 1022-8C1AS)	MWD	MWD - STANDARD
2,558.00	10,463.00	Survey #2 (NBU 1022-8C1AS)	MWD	MWD - STANDARD

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9.00	0.00	0.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00
245.00	0.15	17.70	245.00	0.29	0.09	0.10	0.06	0.06	0.00
337.00	0.88	279.13	337.00	0.52	-0.57	0.77	0.99	0.79	-107.14
427.00	1.96	254.37	426.97	0.22	-2.73	2.33	1.35	1.20	-27.51
521.00	3.08	245.90	520.88	-1.25	-6.59	4.57	1.25	1.19	-9.01
614.00	3.96	261.28	613.70	-2.76	-12.04	8.07	1.38	0.95	16.54
709.00	5.43	276.07	708.38	-2.78	-19.75	14.28	1.99	1.55	15.57
803.00	7.94	288.63	801.74	-0.23	-30.33	24.31	3.07	2.67	13.36
897.00	9.23	299.78	894.69	5.59	-43.03	37.99	2.23	1.37	11.86
991.00	10.64	306.20	987.28	14.46	-56.57	54.15	1.91	1.50	6.83

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Site:	UINTAH_NBU 1022-8B PAD	**MD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Well:	NBU 1022-8C1AS	**North Reference:**	True
Wellbore:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 1022-8C1AS	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,084.00	12.35	308.00	1,078.42	25.65	-71.34	72.68	1.88	1.84	1.94
1,176.00	13.89	305.49	1,168.01	38.12	-88.09	93.56	1.78	1.67	-2.73
1,271.00	15.92	304.00	1,259.81	52.03	-108.17	117.98	2.17	2.14	-1.57
1,365.00	18.29	305.05	1,349.65	67.71	-130.94	145.62	2.54	2.52	1.12
1,460.00	21.10	308.63	1,439.08	86.95	-156.51	177.61	3.22	2.96	3.77
1,555.00	23.21	310.50	1,527.07	109.79	-184.10	213.37	2.34	2.22	1.97
1,650.00	23.13	306.20	1,614.41	132.97	-213.40	250.70	1.78	-0.08	-4.53
1,746.00	22.95	306.02	1,702.75	155.11	-243.75	288.27	0.20	-0.19	-0.19
1,841.00	24.89	306.64	1,789.59	177.93	-274.78	326.79	2.06	2.04	0.65
1,934.00	24.18	306.02	1,874.19	200.81	-305.89	365.41	0.81	-0.76	-0.67
2,029.00	24.01	308.83	1,960.92	224.37	-336.68	404.17	1.22	-0.18	2.96
2,123.00	23.83	308.22	2,046.84	248.11	-366.50	442.26	0.33	-0.19	-0.65
2,217.00	23.39	306.64	2,132.98	271.00	-396.39	479.89	0.82	-0.47	-1.68
2,312.00	22.95	307.08	2,220.31	293.42	-426.29	517.27	0.50	-0.46	0.46
2,408.00	21.72	306.11	2,309.11	315.17	-455.58	553.75	1.34	-1.28	-1.01
2,489.00	20.75	304.53	2,384.61	332.14	-479.51	583.08	1.39	-1.20	-1.95
tie on									
2,558.00	20.48	303.27	2,449.19	345.69	-499.67	607.35	0.75	-0.39	-1.83
2,653.00	19.93	302.58	2,538.35	363.53	-527.21	640.11	0.63	-0.58	-0.73
2,749.00	19.30	307.32	2,628.78	381.96	-553.62	672.30	1.78	-0.66	4.94
2,844.00	19.56	309.12	2,718.37	401.51	-578.44	703.88	0.69	0.27	1.89
2,940.00	20.92	309.90	2,808.44	422.64	-604.06	737.04	1.44	1.42	0.81
3,036.00	22.69	309.24	2,897.57	445.35	-631.55	772.64	1.86	1.84	-0.69
3,131.00	22.25	308.74	2,985.36	468.20	-659.77	808.90	0.50	-0.46	-0.53
3,226.00	22.19	307.62	3,073.30	490.40	-688.01	844.81	0.45	-0.06	-1.18
3,320.00	20.00	309.12	3,161.00	511.38	-714.54	878.62	2.40	-2.33	1.60
3,415.00	19.00	309.37	3,250.55	531.44	-739.10	910.28	1.06	-1.05	0.26
3,511.00	20.81	309.62	3,340.81	552.23	-764.32	942.92	1.89	1.89	0.26
3,607.00	21.19	309.62	3,430.43	574.17	-790.82	977.26	0.40	0.40	0.00
3,702.00	19.81	313.37	3,519.42	596.18	-815.75	1,010.38	2.00	-1.45	3.95
3,797.00	17.94	314.87	3,609.31	617.56	-837.82	1,040.83	2.03	-1.97	1.58
3,893.00	16.81	307.99	3,700.93	636.53	-859.24	1,069.33	2.44	-1.18	-7.17
3,988.00	15.88	306.12	3,792.09	652.65	-880.57	1,096.05	1.12	-0.98	-1.97
4,084.00	16.13	305.62	3,884.37	668.16	-902.02	1,122.52	0.30	0.26	-0.52
4,179.00	15.31	306.62	3,975.82	683.33	-922.81	1,148.26	0.91	-0.86	1.05
4,275.00	17.00	308.12	4,068.02	699.55	-944.03	1,174.96	1.81	1.76	1.56
4,369.00	18.19	303.74	4,157.63	716.18	-967.04	1,203.36	1.89	1.27	-4.66
4,465.00	15.38	305.87	4,249.53	731.97	-989.82	1,231.06	3.00	-2.93	2.22
4,559.00	13.50	305.74	4,340.56	745.68	-1,008.83	1,254.50	2.00	-2.00	-0.14
4,654.00	13.50	306.12	4,432.93	758.70	-1,026.79	1,276.68	0.09	0.00	0.40
4,750.00	14.31	308.49	4,526.12	772.69	-1,045.13	1,299.74	1.03	0.84	2.47
4,844.00	13.56	309.24	4,617.35	786.89	-1,062.76	1,322.35	0.82	-0.80	0.80
4,940.00	12.56	309.99	4,710.87	800.72	-1,079.47	1,344.01	1.06	-1.04	0.78

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Site:	UINTAH_NBU 1022-8B PAD	**MD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Well:	NBU 1022-8C1AS	**North Reference:**	True
Wellbore:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 1022-8C1AS	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,035.00	10.25	312.49	4,803.99	813.07	-1,093.62	1,362.72	2.49	-2.43	2.63
5,131.00	9.63	315.37	4,898.55	824.55	-1,105.56	1,379.14	0.83	-0.65	3.00
5,226.00	7.63	309.87	4,992.47	834.25	-1,115.98	1,393.29	2.28	-2.11	-5.79
5,322.00	6.75	310.87	5,087.71	842.03	-1,125.14	1,405.27	0.93	-0.92	1.04
5,417.00	5.63	305.49	5,182.16	848.38	-1,133.16	1,415.50	1.33	-1.18	-5.66
5,513.00	3.69	309.87	5,277.83	853.10	-1,139.36	1,423.29	2.05	-2.02	4.56
5,608.00	1.63	318.99	5,372.73	856.08	-1,142.59	1,427.66	2.21	-2.17	9.60
5,703.00	1.19	321.49	5,467.70	857.87	-1,144.10	1,429.93	0.47	-0.46	2.63
5,798.00	0.81	329.74	5,562.68	859.22	-1,145.05	1,431.50	0.43	-0.40	8.68
5,894.00	0.63	335.62	5,658.68	860.29	-1,145.61	1,432.58	0.20	-0.19	6.13
5,990.00	0.25	337.74	5,754.67	860.96	-1,145.91	1,433.22	0.40	-0.40	2.21
6,085.00	0.19	177.37	5,849.67	861.00	-1,145.98	1,433.30	0.46	-0.06	-168.81
6,181.00	0.44	166.99	5,945.67	860.48	-1,145.89	1,432.92	0.27	0.26	-10.81
6,276.00	0.56	165.87	6,040.67	859.67	-1,145.69	1,432.28	0.13	0.13	-1.18
6,372.00	0.44	250.37	6,136.67	859.10	-1,145.92	1,432.13	0.71	-0.13	88.02
6,467.00	0.31	259.62	6,231.66	858.93	-1,146.52	1,432.51	0.15	-0.14	9.74
6,563.00	0.25	166.62	6,327.66	858.68	-1,146.73	1,432.53	0.43	-0.06	-96.88
6,658.00	0.19	154.87	6,422.66	858.33	-1,146.61	1,432.23	0.08	-0.06	-12.37
6,752.00	0.13	132.99	6,516.66	858.12	-1,146.47	1,431.99	0.09	-0.06	-23.28
6,847.00	0.44	113.87	6,611.66	857.90	-1,146.06	1,431.52	0.34	0.33	-20.13
6,942.00	0.94	140.49	6,706.65	857.15	-1,145.23	1,430.41	0.61	0.53	28.02
7,038.00	0.75	171.37	6,802.64	855.92	-1,144.63	1,429.20	0.51	-0.20	32.17
7,136.00	0.44	123.37	6,900.64	855.08	-1,144.22	1,428.38	0.57	-0.32	-48.98
7,231.00	0.69	298.62	6,995.64	855.15	-1,144.42	1,428.58	1.19	0.26	184.47
7,327.00	0.50	292.62	7,091.63	855.59	-1,145.31	1,429.56	0.21	-0.20	-6.25
7,422.00	0.38	224.24	7,186.63	855.52	-1,145.91	1,430.00	0.53	-0.13	-71.98
7,517.00	0.44	255.49	7,281.63	855.21	-1,146.49	1,430.28	0.24	0.06	32.89
7,611.00	0.56	151.12	7,375.62	854.71	-1,146.61	1,430.09	0.84	0.13	-111.03
7,705.00	1.13	143.12	7,469.61	853.57	-1,145.84	1,428.79	0.62	0.61	-8.51
7,801.00	0.00	94.49	7,565.61	852.81	-1,145.27	1,427.88	1.18	-1.18	0.00
7,896.00	0.81	242.24	7,660.60	852.50	-1,145.86	1,428.17	0.85	0.85	0.00
7,992.00	0.94	240.74	7,756.59	851.80	-1,147.15	1,428.80	0.14	0.14	-1.56
8,087.00	0.63	219.12	7,851.58	851.01	-1,148.16	1,429.14	0.45	-0.33	-22.76
8,183.00	1.00	189.49	7,947.58	849.78	-1,148.63	1,428.79	0.57	0.39	-30.86
8,278.00	1.50	178.12	8,042.55	847.72	-1,148.73	1,427.65	0.59	0.53	-11.97
8,374.00	1.69	176.24	8,138.52	845.05	-1,148.59	1,425.96	0.21	0.20	-1.96
8,469.00	1.63	186.74	8,233.48	842.31	-1,148.66	1,424.39	0.33	-0.06	11.05
8,563.00	2.00	205.49	8,327.43	839.50	-1,149.52	1,423.43	0.74	0.39	19.95
8,659.00	1.50	203.12	8,423.38	836.83	-1,150.74	1,422.83	0.53	-0.52	-2.47
8,754.00	1.75	197.99	8,518.35	834.31	-1,151.67	1,422.09	0.30	0.26	-5.40
8,849.00	1.69	178.24	8,613.30	831.53	-1,152.08	1,420.77	0.62	-0.06	-20.79
8,945.00	1.56	167.37	8,709.27	828.84	-1,151.75	1,418.91	0.35	-0.14	-11.32
9,039.00	1.63	155.12	8,803.23	826.38	-1,150.91	1,416.78	0.37	0.07	-13.03

Anadarko Petroleum Corp

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Site:	UINTAH_NBU 1022-8B PAD	**MD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Well:	NBU 1022-8C1AS	**North Reference:**	True
Wellbore:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 1022-8C1AS	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,135.00	1.56	141.49	8,899.19	824.12	-1,149.52	1,414.32	0.40	-0.07	-14.20
9,230.00	1.75	143.74	8,994.15	821.94	-1,147.85	1,411.69	0.21	0.20	2.37
9,325.00	1.50	133.24	9,089.11	819.91	-1,146.09	1,409.07	0.41	-0.26	-11.05
9,421.00	1.56	139.49	9,185.08	818.06	-1,144.33	1,406.55	0.18	0.06	6.51
9,516.00	1.88	133.49	9,280.04	816.00	-1,142.36	1,403.74	0.39	0.34	-6.32
9,612.00	1.88	137.62	9,375.99	813.76	-1,140.15	1,400.64	0.14	0.00	4.30
9,707.00	1.75	143.99	9,470.94	811.43	-1,138.25	1,397.73	0.25	-0.14	6.71
9,802.00	1.88	139.74	9,565.89	809.07	-1,136.39	1,394.83	0.20	0.14	-4.47
9,898.00	2.25	133.62	9,661.83	806.57	-1,134.01	1,391.43	0.45	0.39	-6.38
9,993.00	2.31	130.49	9,756.75	804.04	-1,131.20	1,387.67	0.15	0.06	-3.29
10,088.00	2.38	131.74	9,851.67	801.48	-1,128.27	1,383.80	0.09	0.07	1.32
10,184.00	2.44	132.49	9,947.59	798.77	-1,125.28	1,379.78	0.07	0.06	0.78
10,279.00	2.44	134.74	10,042.50	795.99	-1,122.35	1,375.77	0.10	0.00	2.37
10,403.00	2.69	132.38	10,166.38	792.17	-1,118.33	1,370.27	0.22	0.20	-1.90
last mwd survey									
10,463.00	2.69	132.38	10,226.31	790.27	-1,116.25	1,367.47	0.00	0.00	0.00
projection									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,489.00	2,384.61	332.14	-479.51	tie on
10,403.00	10,166.38	792.17	-1,118.33	last mwd survey
10,463.00	10,226.31	790.27	-1,116.25	projection

Checked By: _____ Approved By: _____ Date: _____

US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N
UINTAH_NBU 1022-8B PAD
NBU 1022-8C1AS

NBU 1022-8C1AS

Design: NBU 1022-8C1AS

Survey Report - Geographic

11 April, 2012

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Site:	UINTAH_NBU 1022-8B PAD	**MD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Well:	NBU 1022-8C1AS	**North Reference:**	True
Wellbore:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 1022-8C1AS	**Database:**	edmp

Project UTAH - UTM (feet), NAD27, Zone 12N

Map System:	Universal Transverse Mercator (US Survey Feet)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site UINTAH_NBU 1022-8B PAD

Site Position:		**Northing:**	14,518,172.28 usft	**Latitude:**	39.968147
From:	Lat/Long	**Easting:**	2,071,981.26 usft	**Longitude:**	-109.459767
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.99 °

Well NBU 1022-8C1AS

Well Position	**+N/-S**	0.00 ft	**Northing:**	14,518,184.58 usft	**Latitude:**	39.968180
	+E/-W	0.00 ft	**Easting:**	2,071,997.02 usft	**Longitude:**	-109.459710
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,185.30 ft

Wellbore NBU 1022-8C1AS

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	3/12/2012	10.96	65.83	52,242

Design NBU 1022-8C1AS

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	9.00

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	9.00	0.00	0.00	306.29

Survey Program **Date** 4/10/2012

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
245.00	2,489.00	Survey #1 (NBU 1022-8C1AS)	MWD	MWD - STANDARD
2,558.00	10,463.00	Survey #2 (NBU 1022-8C1AS)	MWD	MWD - STANDARD

Survey

Measured Depth (ft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Map Northing (usft)**	**Map Easting (usft)**	**Latitude**	**Longitude**
9.00	0.00	0.00	9.00	0.00	0.00	14,518,184.58	2,071,997.02	39.968180	-109.459710
245.00	0.15	17.70	245.00	0.29	0.09	14,518,184.87	2,071,997.11	39.968181	-109.459710
337.00	0.88	279.13	337.00	0.52	-0.57	14,518,185.09	2,071,996.45	39.968182	-109.459712
427.00	1.96	254.37	426.97	0.22	-2.73	14,518,184.75	2,071,994.29	39.968181	-109.459720
521.00	3.08	245.90	520.88	-1.25	-6.59	14,518,183.22	2,071,990.46	39.968177	-109.459734
614.00	3.96	261.28	613.70	-2.76	-12.04	14,518,181.61	2,071,985.03	39.968173	-109.459753
709.00	5.43	276.07	708.38	-2.78	-19.75	14,518,181.46	2,071,977.32	39.968172	-109.459781
803.00	7.94	288.63	801.74	-0.23	-30.33	14,518,183.82	2,071,966.70	39.968179	-109.459819
897.00	9.23	299.78	894.69	5.59	-43.03	14,518,189.42	2,071,953.91	39.968195	-109.459864
991.00	10.64	306.20	987.28	14.46	-56.57	14,518,198.05	2,071,940.21	39.968220	-109.459912
1,084.00	12.35	308.00	1,078.42	25.65	-71.34	14,518,208.99	2,071,925.25	39.968251	-109.459965

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Site:	UINTAH_NBU 1022-8B PAD	**MD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Well:	NBU 1022-8C1AS	**North Reference:**	True
Wellbore:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 1022-8C1AS	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,176.00	13.89	305.49	1,168.01	38.12	-88.09	14,518,221.17	2,071,908.29	39.968285	-109.460025
1,271.00	15.92	304.00	1,259.81	52.03	-108.17	14,518,234.73	2,071,887.97	39.968323	-109.460096
1,365.00	18.29	305.05	1,349.65	67.71	-130.94	14,518,250.02	2,071,864.93	39.968366	-109.460178
1,460.00	21.10	308.63	1,439.08	86.95	-156.51	14,518,268.81	2,071,839.04	39.968419	-109.460269
1,555.00	23.21	310.50	1,527.07	109.79	-184.10	14,518,291.17	2,071,811.05	39.968482	-109.460367
1,650.00	23.13	306.20	1,614.41	132.97	-213.40	14,518,313.84	2,071,781.36	39.968545	-109.460472
1,746.00	22.95	306.02	1,702.75	155.11	-243.75	14,518,335.45	2,071,750.63	39.968606	-109.460580
1,841.00	24.89	306.64	1,789.59	177.93	-274.78	14,518,357.74	2,071,719.21	39.968669	-109.460691
1,934.00	24.18	306.02	1,874.19	200.81	-305.89	14,518,380.08	2,071,687.71	39.968731	-109.460802
2,029.00	24.01	308.83	1,960.92	224.37	-336.68	14,518,403.10	2,071,656.52	39.968796	-109.460912
2,123.00	23.83	308.22	2,046.84	248.11	-366.50	14,518,426.32	2,071,626.30	39.968861	-109.461018
2,217.00	23.39	306.64	2,132.98	271.00	-396.39	14,518,448.69	2,071,596.02	39.968924	-109.461125
2,312.00	22.95	307.08	2,220.31	293.42	-426.29	14,518,470.59	2,071,565.73	39.968986	-109.461231
2,408.00	21.72	306.11	2,309.11	315.17	-455.58	14,518,491.83	2,071,536.07	39.969045	-109.461336
2,489.00	20.75	304.53	2,384.61	332.14	-479.51	14,518,508.39	2,071,511.85	39.969092	-109.461421
tie on									
2,558.00	20.48	303.27	2,449.19	345.69	-499.67	14,518,521.59	2,071,491.46	39.969129	-109.461493
2,653.00	19.93	302.58	2,538.35	363.53	-527.21	14,518,538.94	2,071,463.61	39.969178	-109.461592
2,749.00	19.30	307.32	2,628.78	381.96	-553.62	14,518,556.91	2,071,436.89	39.969229	-109.461686
2,844.00	19.56	309.12	2,718.37	401.51	-578.44	14,518,576.03	2,071,411.74	39.969282	-109.461774
2,940.00	20.92	309.90	2,808.44	422.64	-604.06	14,518,596.72	2,071,385.76	39.969341	-109.461866
3,036.00	22.69	309.24	2,897.57	445.35	-631.55	14,518,618.95	2,071,357.88	39.969403	-109.461964
3,131.00	22.25	308.74	2,985.36	468.20	-659.77	14,518,641.31	2,071,329.27	39.969466	-109.462065
3,226.00	22.19	307.62	3,073.30	490.40	-688.01	14,518,663.02	2,071,300.65	39.969527	-109.462165
3,320.00	20.00	309.12	3,161.00	511.38	-714.54	14,518,683.54	2,071,273.76	39.969584	-109.462260
3,415.00	19.00	309.37	3,250.55	531.44	-739.10	14,518,703.18	2,071,248.86	39.969639	-109.462348
3,511.00	20.81	309.62	3,340.81	552.23	-764.32	14,518,723.53	2,071,223.28	39.969696	-109.462438
3,607.00	21.19	309.62	3,430.43	574.17	-790.82	14,518,745.00	2,071,196.41	39.969757	-109.462532
3,702.00	19.81	313.37	3,519.42	596.18	-815.75	14,518,766.58	2,071,171.10	39.969817	-109.462621
3,797.00	17.94	314.87	3,609.31	617.56	-837.82	14,518,787.57	2,071,148.66	39.969876	-109.462700
3,893.00	16.81	307.99	3,700.93	636.53	-859.24	14,518,806.17	2,071,126.91	39.969928	-109.462776
3,988.00	15.88	306.12	3,792.09	652.65	-880.57	14,518,821.92	2,071,105.31	39.969972	-109.462852
4,084.00	16.13	305.62	3,884.37	668.16	-902.02	14,518,837.06	2,071,083.60	39.970015	-109.462929
4,179.00	15.31	306.62	3,975.82	683.33	-922.81	14,518,851.86	2,071,062.55	39.970056	-109.463003
4,275.00	17.00	308.12	4,068.02	699.55	-944.03	14,518,867.72	2,071,041.05	39.970101	-109.463079
4,369.00	18.19	303.74	4,157.63	716.18	-967.04	14,518,883.95	2,071,017.76	39.970146	-109.463161
4,465.00	15.38	305.87	4,249.53	731.97	-989.82	14,518,899.34	2,070,994.71	39.970190	-109.463242
4,559.00	13.50	305.74	4,340.56	745.68	-1,008.83	14,518,912.73	2,070,975.46	39.970227	-109.463310
4,654.00	13.50	306.12	4,432.93	758.70	-1,026.79	14,518,925.43	2,070,957.28	39.970263	-109.463374
4,750.00	14.31	308.49	4,526.12	772.69	-1,045.13	14,518,939.10	2,070,938.71	39.970302	-109.463440
4,844.00	13.56	309.24	4,617.35	786.89	-1,062.76	14,518,952.99	2,070,920.84	39.970341	-109.463503
4,940.00	12.56	309.99	4,710.87	800.72	-1,079.47	14,518,966.53	2,070,903.89	39.970379	-109.463562
5,035.00	10.25	312.49	4,803.99	813.07	-1,093.62	14,518,978.63	2,070,889.53	39.970412	-109.463613
5,131.00	9.63	315.37	4,898.55	824.55	-1,105.56	14,518,989.91	2,070,877.39	39.970444	-109.463655
5,226.00	7.63	309.87	4,992.47	834.25	-1,115.98	14,518,999.42	2,070,866.80	39.970471	-109.463693
5,322.00	6.75	310.87	5,087.71	842.03	-1,125.14	14,519,007.04	2,070,857.51	39.970492	-109.463725
5,417.00	5.63	305.49	5,182.16	848.38	-1,133.16	14,519,013.26	2,070,849.39	39.970509	-109.463754
5,513.00	3.69	309.87	5,277.83	853.10	-1,139.36	14,519,017.87	2,070,843.10	39.970522	-109.463776
5,608.00	1.63	318.99	5,372.73	856.08	-1,142.59	14,519,020.79	2,070,839.81	39.970531	-109.463787
5,703.00	1.19	321.49	5,467.70	857.87	-1,144.10	14,519,022.56	2,070,838.28	39.970535	-109.463793
5,798.00	0.81	329.74	5,562.68	859.22	-1,145.05	14,519,023.89	2,070,837.31	39.970539	-109.463796
5,894.00	0.63	335.62	5,658.68	860.29	-1,145.61	14,519,024.95	2,070,836.73	39.970542	-109.463798
5,990.00	0.25	337.74	5,754.67	860.96	-1,145.91	14,519,025.62	2,070,836.42	39.970544	-109.463799
6,085.00	0.19	177.37	5,849.67	861.00	-1,145.98	14,519,025.65	2,070,836.35	39.970544	-109.463800
6,181.00	0.44	166.99	5,945.67	860.48	-1,145.89	14,519,025.14	2,070,836.45	39.970543	-109.463799

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Site:	UINTAH_NBU 1022-8B PAD	**MD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Well:	NBU 1022-8C1AS	**North Reference:**	True
Wellbore:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 1022-8C1AS	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,276.00	0.56	165.87	6,040.67	859.67	-1,145.69	14,519,024.33	2,070,836.66	39.970540	-109.463799
6,372.00	0.44	250.37	6,136.67	859.10	-1,145.92	14,519,023.75	2,070,836.43	39.970539	-109.463799
6,467.00	0.31	259.62	6,231.66	858.93	-1,146.52	14,519,023.57	2,070,835.84	39.970538	-109.463802
6,563.00	0.25	166.62	6,327.66	858.68	-1,146.73	14,519,023.32	2,070,835.64	39.970538	-109.463802
6,658.00	0.19	154.87	6,422.66	858.33	-1,146.61	14,519,022.98	2,070,835.76	39.970537	-109.463802
6,752.00	0.13	132.99	6,516.66	858.12	-1,146.47	14,519,022.76	2,070,835.91	39.970536	-109.463801
6,847.00	0.44	113.87	6,611.66	857.90	-1,146.06	14,519,022.55	2,070,836.32	39.970536	-109.463800
6,942.00	0.94	140.49	6,706.65	857.15	-1,145.23	14,519,021.82	2,070,837.17	39.970533	-109.463797
7,038.00	0.75	171.37	6,802.64	855.92	-1,144.63	14,519,020.60	2,070,837.78	39.970530	-109.463795
7,136.00	0.44	123.37	6,900.64	855.08	-1,144.22	14,519,019.76	2,070,838.21	39.970528	-109.463793
7,231.00	0.69	298.62	6,995.64	855.15	-1,144.42	14,519,019.83	2,070,838.01	39.970528	-109.463794
7,327.00	0.50	292.62	7,091.63	855.59	-1,145.31	14,519,020.26	2,070,837.11	39.970529	-109.463797
7,422.00	0.38	224.24	7,186.63	855.52	-1,145.91	14,519,020.18	2,070,836.51	39.970529	-109.463799
7,517.00	0.44	255.49	7,281.63	855.21	-1,146.49	14,519,019.85	2,070,835.94	39.970528	-109.463801
7,611.00	0.56	151.12	7,375.62	854.71	-1,146.61	14,519,019.36	2,070,835.82	39.970527	-109.463802
7,705.00	1.13	143.12	7,469.61	853.57	-1,145.84	14,519,018.23	2,070,836.62	39.970524	-109.463799
7,801.00	0.00	94.49	7,565.61	852.81	-1,145.27	14,519,017.48	2,070,837.20	39.970522	-109.463797
7,896.00	0.81	242.24	7,660.60	852.50	-1,145.86	14,519,017.16	2,070,836.61	39.970521	-109.463799
7,992.00	0.94	240.74	7,756.59	851.80	-1,147.15	14,519,016.43	2,070,835.33	39.970519	-109.463804
8,087.00	0.63	219.12	7,851.58	851.01	-1,148.16	14,519,015.63	2,070,834.34	39.970517	-109.463807
8,183.00	1.00	189.49	7,947.58	849.78	-1,148.63	14,519,014.39	2,070,833.89	39.970513	-109.463809
8,278.00	1.50	178.12	8,042.55	847.72	-1,148.73	14,519,012.33	2,070,833.83	39.970508	-109.463809
8,374.00	1.69	176.24	8,138.52	845.05	-1,148.59	14,519,009.66	2,070,834.01	39.970500	-109.463809
8,469.00	1.63	186.74	8,233.48	842.31	-1,148.66	14,519,006.92	2,070,833.99	39.970493	-109.463809
8,563.00	2.00	205.49	8,327.43	839.50	-1,149.52	14,519,004.10	2,070,833.18	39.970485	-109.463812
8,659.00	1.50	203.12	8,423.38	836.83	-1,150.74	14,519,001.41	2,070,832.01	39.970478	-109.463817
8,754.00	1.75	197.99	8,518.35	834.31	-1,151.67	14,518,998.87	2,070,831.11	39.970471	-109.463820
8,849.00	1.69	178.24	8,613.30	831.53	-1,152.08	14,518,996.08	2,070,830.76	39.970463	-109.463821
8,945.00	1.56	167.37	8,709.27	828.84	-1,151.75	14,518,993.40	2,070,831.13	39.970456	-109.463820
9,039.00	1.63	155.12	8,803.23	826.38	-1,150.91	14,518,990.95	2,070,832.02	39.970449	-109.463817
9,135.00	1.56	141.49	8,899.19	824.12	-1,149.52	14,518,988.72	2,070,833.44	39.970443	-109.463812
9,230.00	1.75	143.74	8,994.15	821.94	-1,147.85	14,518,986.56	2,070,835.15	39.970437	-109.463806
9,325.00	1.50	133.24	9,089.11	819.91	-1,146.09	14,518,984.57	2,070,836.94	39.970431	-109.463800
9,421.00	1.56	139.49	9,185.08	818.06	-1,144.33	14,518,982.75	2,070,838.74	39.970426	-109.463794
9,516.00	1.88	133.49	9,280.04	816.00	-1,142.36	14,518,980.73	2,070,840.75	39.970421	-109.463787
9,612.00	1.88	137.62	9,375.99	813.76	-1,140.15	14,518,978.52	2,070,842.99	39.970414	-109.463779
9,707.00	1.75	143.99	9,470.94	811.43	-1,138.25	14,518,976.23	2,070,844.93	39.970408	-109.463772
9,802.00	1.88	139.74	9,565.89	809.07	-1,136.39	14,518,973.90	2,070,846.83	39.970401	-109.463765
9,898.00	2.25	133.62	9,661.83	806.57	-1,134.01	14,518,971.44	2,070,849.26	39.970395	-109.463757
9,993.00	2.31	130.49	9,756.75	804.04	-1,131.20	14,518,968.96	2,070,852.11	39.970388	-109.463747
10,088.00	2.38	131.74	9,851.67	801.48	-1,128.27	14,518,966.45	2,070,855.08	39.970381	-109.463736
10,184.00	2.44	132.49	9,947.59	798.77	-1,125.28	14,518,963.80	2,070,858.12	39.970373	-109.463726
10,279.00	2.44	134.74	10,042.50	795.99	-1,122.35	14,518,961.06	2,070,861.09	39.970366	-109.463715
10,403.00	2.69	132.38	10,166.38	792.17	-1,118.33	14,518,957.31	2,070,865.18	39.970355	-109.463701
last mwd survey									
10,463.00	2.69	132.38	10,226.31	790.27	-1,116.25	14,518,955.45	2,070,867.29	39.970350	-109.463693
projection									

Anadarko Petroleum Corp

Survey Report - Geographic

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well NBU 1022-8C1AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Site:	UINTAH_NBU 1022-8B PAD	**MD Reference:**	18' RKB + GL @ 5203.30ft (SST 54)
Well:	NBU 1022-8C1AS	**North Reference:**	True
Wellbore:	NBU 1022-8C1AS	**Survey Calculation Method:**	Minimum Curvature
Design:	NBU 1022-8C1AS	**Database:**	edmp

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,489.00	2,384.61	332.14	-479.51	tie on
10,403.00	10,166.38	792.17	-1,118.33	last mwd survey
10,463.00	10,226.31	790.27	-1,116.25	projection

Checked By: _____ Approved By: _____ Date: _____